

**AGENDA
ZONING COMMITTEE
OF THE SAINT PAUL PLANNING COMMISSION
Thursday, June 16, 2011 3:30 P.M.
City Council Chambers
Third Floor City Hall - Saint Paul, Minnesota**

NOTE: The order in which the items appear on this agenda is not necessarily the order in which they will be heard at the meeting. The Zoning Committee will determine the order of the agenda at the beginning of its meeting.

APPROVAL OF JUNE 2, 2011, ZONING COMMITTEE MINUTES

SITE PLAN REVIEW – List of current applications (Tom Beach, 651-266-9086)

OLD BUSINESS

- 1 11-129-965 Capitol Lien & Title**
Determination of similar use for vertical wind turbines in the B3 general business district
1010 Dale St N, between Lawson and Hatch
B3
Kate Reilly 651-266-6618

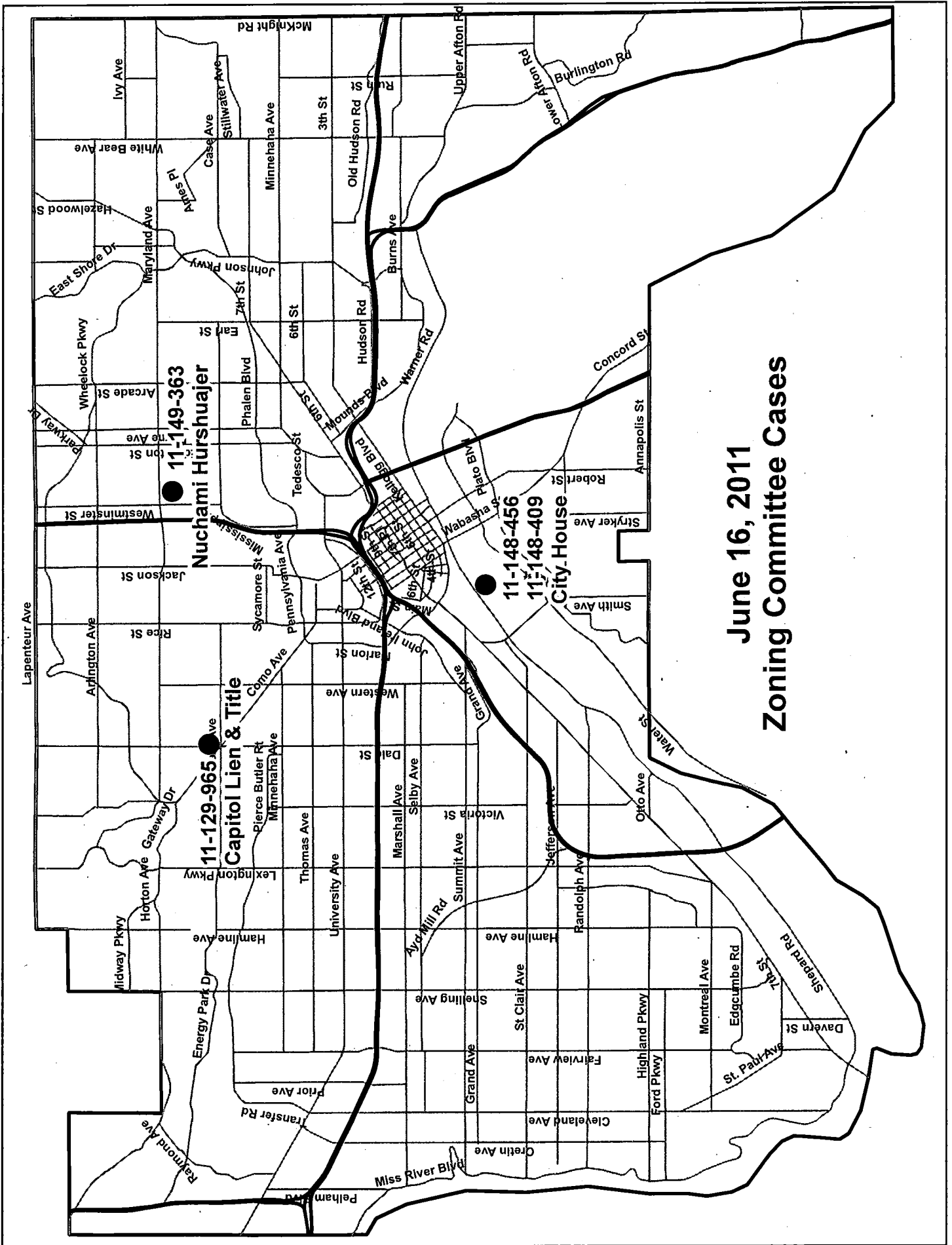
NEW BUSINESS

- 2 11-149-363 Nuchami Hurshuajer**
Re-Establishment of nonconforming use as a duplex
393 Geranium Ave E, NW corner at Arkwright
R4
Sarah Zorn 651-266-6570
- 3 11-148-456 City House (Re-est)**
Re-establishment of nonconforming use as a reception hall in the FW Floodway District
258 Mill St, south side of intersection of Walnut and Mill Street
TN3M
Josh Williams 651-266-6659
- 4 11-148-409 City House (CUP)**
Conditional Use Permit for a reception hall
258 Mill St, south side of intersection of Walnut and Mill Street
TN3M
Josh Williams 651-266-6659

ADJOURNMENT

ZONING COMMITTEE MEMBERS: Call Patricia James at 266-6639 or Samantha Langer at 266-6550 if you are unable to attend the meeting.

APPLICANT: You or your designated representative must attend this meeting to answer any questions that the committee may have.



June 16, 2011 Zoning Committee Cases

ZONING COMMITTEE STAFF REPORT

1. **FILE NAME:** Capitol Lien & Title **FILE #** 11-129-965
 2. **APPLICANT:** Capitol Lien and Title / Tony Magnotta **HEARING DATE:** 5/5/11, 6/16/11
 3. **TYPE OF APPLICATION:** Determination of Similar Use
 4. **LOCATION:** 1010 Dale St N, between Lawson and Hatch
 5. **PIN & LEGAL DESCRIPTION:** PID 25-29-23-23-0063 & 0064; Lots 3-8, Blk 13, Como Prospect Addition
 6. **PLANNING DISTRICT:** 6 **EXISTING ZONING:** B3
 7. **ZONING CODE REFERENCE:** § 61.106, § 61.107, § 61.501, § 65.910, § 63.121, § 65.310
 8. **STAFF REPORT DATE:** 4/27/11, amended 5/11/11 and 6/8/11 **BY:** Kate Reilly
 9. **DATE RECEIVED:** April 12, 2011 **60-DAY DEADLINE FOR ACTION:** Extended to 6/25/2011
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- A. **PURPOSE:** Determination of similar use for vertical wind turbines in the B3 general business district
- B. **PARCEL SIZE:** 150 ft. frontage x 126.03 ft = 18,904 sq. ft.
- C. **EXISTING LAND USE:** Business
- D. **SURROUNDING LAND USE:**
 - North: B3 - Business
 - East: RM2 – Single family & Multi-family residential
 - South: B3 - Business
 - West: B3 - Business; R4 – Single family residential
- E. **ZONING CODE CITATION:** § 61.106 authorizes the planning commission to make similar use determinations when a specific use is not listed in the zoning code. § 61.107 authorizes the planning commission to impose reasonable conditions and limitations in making a similar use determination. § 61.501 lists general conditions that must be met by conditional uses. § 65.910 defines *accessory use* and lists examples of accessory uses. § 63.121 permits and provides standards for antennas as accessory uses in all districts. § 65.310 lists standards for cellular telephone antennas.
- F. **HISTORY/DISCUSSION:** A determination of similar use/conditional use permit was granted to Macalester College for a 10 kW, 102 foot high, free-standing wind turbine on the campus for a test period in 2002 (Z.F. # 02-236-646) and permanently in 2005 based on noise monitoring during the test period (Z.F. # 05-085-530). On April 15, 2011, the planning commission initiated a zoning study to consider amendments to the zoning code pertaining to wind turbines that will address issues specific to wind turbines and conditions under which wind turbines would be permitted in various zoning districts.
- G. **DISTRICT COUNCIL RECOMMENDATION:** The District 6 Council recommends approval of the determination of similar use.
- H. **FINDINGS:**
 1. Capitol Lien and Title proposes installing four vertical wind turbines, three building-mounted wind turbines and one on a freestanding pole, as an accessory use to provide electricity for the business at 1010 N. Dale Street. The three proposed roof-mounted 1.5 kW turbines would extend 15.8 ft. above the surface of the roof (a 9.8 ft. tall turbine mounted on a 6 ft. monopole).

The proposed freestanding 3 kW turbine itself is 18.4 ft. tall. It would be mounted on a 13 ft. monopole, for a total height of 31.4 feet.

2. § 61.106 authorizes the planning commission to make similar use determinations when a specific use is not listed in the zoning code. The proposed wind turbines as an accessory use to provide electricity for the business at 1010 N. Dale Street generally meets the definition of accessory use in § 65.910, "a building, structure or use which is clearly incidental to, customarily found in connection with, and (except as provided in section 63.300) located on the same zoning lot as, the principal use to which it is related." While § 60.103(k) of the zoning code states that a purpose of the zoning code is "to promote the conservation of energy and the utilization of renewable energy resources," suggesting that the zoning code generally supports permitting wind turbines, § 65.910 does not specifically include wind turbine in a list of examples of what the term accessory use includes but is not limited to. Therefore, § 65.910 also does not include any specific standards for wind turbines in various zoning districts.

On April 15, 2011, the planning commission initiated a zoning study to consider amendments to the zoning code pertaining to wind turbines that will address issues specific to wind turbines and conditions under which wind turbines would be permitted in various zoning districts. Preliminary research finds that small wind turbines designed to provide electricity for the property on which they are located are commonly permitted as accessory uses in other cities, subject to reasonable conditions that may vary dependent on the size and location of the turbine. Minneapolis, Duluth, Madison and Chicago all have specific provisions for this.

Minneapolis permits administrative approval of accessory building mounted systems in all zoning districts, up to 15 feet in height above the roof, including on residential buildings at least 4 stories tall. Minneapolis also requires that building mounted systems "shall be set back at least ten (10) feet from the front, side and rear walls of the structure upon which it would be mounted." Chicago has a similar height standard for building mounted systems in residential districts, 15 feet above the rooftop or parapet, whichever is greater.

Minneapolis permits freestanding systems as a conditional use, up to 60 feet high on zoning lots between one and five acres in residential and commercial districts, and requires a set back of at least twice the height of the tower from residential structures and overhead utility lines.

Duluth permits wind energy conversion systems both as a principal and as an accessory use. As an accessory use the height can not exceed 50 feet without a special use permit. Duluth exempts wind energy conversion systems for regular zoning district height limits, requires freestanding systems to be set back from property lines at least as far as the tower height, and requires the lowest point of the rotor to be at least 15 feet above the ground.

Finish is also regulated in Duluth: "The turbine and tower shall remain painted or finished in the color that was originally applied by the manufacturer." Minneapolis requires materials and colors that are compatible with the principal structure, prevent communication signal interference, and blend into the surroundings as much as possible.

The Boston, MA, code talks about minimizing glare and flickering shadows, and requires the applicant to show that this would not have significant impact on neighboring uses.

Bat and bird impacts are not specifically mentioned in any codes currently established in the US. However, there have been some studies that suggest that at large wind sites anywhere from 1 to 3 birds are killed per tower per year. Bats experience a kill rate of almost three times that. For most urban applications wind turbines are mounted lower than bird and bat migration paths. "Because of the relatively smaller blades and short tower heights, home-sized wind machines are considered too small and too dispersed to present a threat to birds. Researchers

do not consider a study of home-sized wind systems worth funding.” (focusonenergy.com) No research was found about birds or bats and vertical wind turbines. An industry representative has stated that vertical wind turbines appear to be solid objects when spinning, which would cause birds and bats to fly around them, rather than try to go through them. There is no evidence to suggest that vertical wind turbines create enough disturbances in the wind to draw birds or bats in to them.

3. § 61.106 states that in making a similar use determination the planning commission shall make the following findings:

(a) *That the use is similar in character to one (1) or more of the principal uses permitted.*

Antennas permitted in the B3 general business district share some characteristics with a vertical wind turbine: both may be mounted on a building roof or on a freestanding pole. §63.121 permits accessory antennas in all districts, including a television receiving satellite dish 3 meters or less in diameter and short-wave radio antennas, to extend up to 15 feet above the normal height restriction for the district (e.g., 15 feet above the 30 foot height limit in the B3 district). While antennas are static objects and do not create sound, by their nature wind turbines have dynamic, moving elements. Other uses permitted in the B3 district include outdoor elements that move or create sound. Outdoor compressors and chillers accessory to a grocery store or restaurant, for example, create sound. Auto service stations and drive-through sales and services permitted in the B3 district often include outdoor elements that move and create sound.

(b) *That the traffic generated on such use is similar to one (1) or more of the principal uses permitted.* This finding can be made. The minimal traffic generated by wind turbines is substantially less than most uses permitted in the B3 district.

(c) *That the use is not first permitted in a less restrictive zoning district.* This finding is made. “Wind turbine” is not specifically listed as a permitted use in any zoning district.

(d) *The use is consistent with the comprehensive plan.* This finding is made. While the Saint Paul Comprehensive Plan does not contain any policies specifically related to wind turbines, the use is consistent with broad policies in the comprehensive plan for energy conservation and sustainable use of renewable energy resources. The proposed wind turbines are consistent with the intent and purpose of the zoning code “to implement the policies of the comprehensive plan,” including the purpose specifically stated in § 60.103(k) of the zoning code “to promote the conservation of energy and the utilization of renewable energy resources.”

4. Because vertical wind turbines share some characteristics with cellular telephone antennas, it may be useful to consider the standards for cellular telephone antennas in the B3 district. §65.310 provides for cellular telephone antennas in the B3 general business district as permitted uses if they are building-mounted and as conditional uses if they are freestanding. The standards and conditions listed in § 65.310 for cellular telephone antennas in the B3 general business district that might also be applicable to the proposed wind turbines, and the consistency of the proposed wind turbines with them, are as follows:

(b) *In . . . OS-B3 . . . business districts, the antennas shall not extend more than fifteen (15) feet above the structural height of the structure to which they are attached.* The proposed roof-mounted wind turbines are reasonably consistent with this standard. The applicant proposes to mount the turbines on 6 foot monopoles to protect the turbines and to protect people on the roof from bumping into the turbines. The turbines themselves are 9.8 feet high. Together with a 6 foot pole, the top of the turbines would be 15.8 feet above the roof

surface itself, and 14.3 feet above the top of the 18 inch parapet.

- (d) *In . . . business districts, cellular telephone antennas to be located on a new freestanding pole are subject to the following standards and conditions:*
- (1) *The freestanding pole shall not exceed seventy-five (75) feet in height, unless the applicant demonstrates that the surrounding topography, structures, or vegetation renders a seventy-five-foot pole impractical. Freestanding poles may exceed the above height limit by twenty-five (25) feet if the pole is designed to carry two (2) antennas. The proposed 31.4 foot tall wind turbine on a free-standing pole is consistent with this standard.*
 - (2) *Antennas shall not be located in a required front or side yard and shall be set back one (1) times the height of the antenna plus ten (10) feet from the nearest residential structure. The wind turbine is not located in a required front or side yard. The location of the proposed pole is 51 feet from the nearest residential property, and farther from the nearest residential structure, consistent with this standard.*
 - (3) *The antennas shall be designed where possible to blend into the surrounding environment through the use of color and camouflaging architectural treatment. The proposed wind turbine and pole would have non-reflective subdued finishes to blend into the surrounding environment as much as possible. They would also be located to reduce their visual impact.*
 - (4) *In business districts, the zoning lot on which the pole is located shall be within contiguous property with OS or less restrictive zoning at least one (1) acre in area. The lot is within a large contiguous area of B3 and industrial zoning consistent with this standard.*
- (g) *Freestanding poles shall be a monopole design. The proposed freestanding pole is a monopole design consistent with this standard.*
- (h) *Transmitting, receiving and switching equipment shall be housed within an existing structure whenever possible. If a new equipment building is necessary, it shall be permitted and regulated as an accessory building, section 63.500, and screened from view by landscaping where appropriate. The applicant states that all electrical equipment related to the wind turbines will be located in the existing building, and wires from the freestanding turbine to the electrical equipment will be buried.*
5. § 65.310 provides for cellular telephone antennas on a freestanding pole in the B3 district as a conditional use. Because the proposed vertical wind turbine on a freestanding pole shares some characteristics with a cellular telephone antenna on a freestanding pole, it may be useful to review the proposed wind turbine on a freestanding pole for conformance with the general standards in § 61.501 that apply to approval of conditional use permits:
- (a) *The extent, location and intensity of the use will be in substantial compliance with the Saint Paul Comprehensive Plan and any applicable subarea plans which were approved by the city council. The wind turbine is consistent with this standard as stated in Finding 3(d).*
 - (b) *The use will provide adequate ingress and egress to minimize traffic congestion in the public streets. The turbine will generate minimal traffic and is consistent with this standard.*
 - (c) *The use will not be detrimental to the existing character of the development in the immediate neighborhood or endanger the public health, safety and general welfare. Based on the information provided in the application, the impact of potential sound created by the*

proposed wind turbines on the character and welfare of the immediate area is unclear.

The impact of sound generated by wind turbines is affected by a number of variables. In order for a sound to be heard over ambient noise it must be at least twice as loud as the ambient noise. Noise monitoring found that the sound generated by the 10 kW turbine at Macalester, for example, was imperceptible because of ambient noise in the area. Sound generated by the turbines increases with wind speed, while increased wind also increases ambient noise. Sound decreases 6 dB(A) for each doubling of distance from the source. Cumulative sound is measured logarithmically. For example, two things making sound at 50 dB(A) would have a cumulative sound level of 53dB(A) and four would generate a sound level of 56 dB(A).

Based on data provided by the applicant, sound from the 3000 watt wind turbine is 55 dB(A) at a wind speed of 11 miles per hour and 65 dB(A) at a wind speed 22 miles per hour. A speed limiter starts at a wind speed of 28 mph, and the turbine shuts down at a wind speed of 33 miles per hour. Based on the data provided, it appears that the turbine would meet the L10 (10% of an hour) city noise limit standard of 70 dB(A) for commercial districts. The city noise standard in residential districts is an L10 of 65dB(A) in the daytime (7:00 a.m. to 10:00 p.m.) and an L10 of 55dB(A) at night (10:00 p.m. to 7:00 a.m.). Also, the Minnesota noise pollution rules for residential areas have an L50 (50% of an hour) standard of 60 dB(A) in the daytime and an L50 of 50 dB(A) at night. These are measured at the point of nearest human activity. Based on the data provided and the distance to residential property, it appears that the turbine may meet the 65 dB(A) daytime city noise standard for residential districts. While wind generally blows at a lower speed in the night time, the proposed turbines are close enough to the point of nearest human activity on residential property that these standards could be violated, particularly with the cumulative sound of the four proposed turbines.

Section 293.08(b) of the Saint Paul Legislative Code states that any city department or agency may require a noise impact statement in association with any change in zoning classification, in planning of a structure, or in any operation, process, installation or alteration which may be considered as a potential noise source. Such a noise impact analysis performed by an acoustical engineer could suggest changes to the number or location of the proposed wind turbines, or other mitigation measures, as necessary to conform to the city and state noise standards, and thus protect the character and welfare of the area.

(d) *The use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.* The proposed wind turbine is consistent with this standard.

(e) *The use shall, in all other respects, conform to the applicable regulations of the district in which it is located.* The proposed wind turbine is consistent with this standard.

6. § 61.107 of the zoning code states that "the planning commission . . . may impose such reasonable conditions and limitations in . . . making a similar use determination, as are determined to be necessary to fulfill the spirit and purpose of the zoning code, to ensure compliance, and to protect adjacent properties."

- I. **STAFF RECOMMENDATION:** Based on the above findings, staff recommends approval of a determination of similar use for three 1.5 kW roof-mounted vertical wind turbines (with a height of 15.8 feet above the roof surface) and one 3.0 kW vertical wind turbine on a freestanding pole (with a total height of 31.4 feet) in the parking lot, in the B3 general business district, or a less restrictive

district, at 1010 N. Dale Street, subject to the following conditions:

1. The turbines shall be an accessory use to provide electricity for the business on the property.
2. The lot shall be at least 18,000 sq. feet in area, on which there shall be no more than four turbines, including no more than three on the roof and no more than one on a freestanding pole.
3. Roof-mounted turbines shall be no more than 15 feet above the rooftop or parapet, whichever is greater, and centered at least 20 feet from the edge of the building.
4. The wind turbine on a freestanding pole shall have a total height of no more than 32 feet.
5. The turbines shall be centered at least 50 feet from any residentially zoned property.
6. The applicant shall provide a noise impact statement to the Zoning Administrator, completed by an acoustical engineer, showing that when in operation, the sound levels from the wind turbines will be in compliance with all city and state noise standards in Saint Paul Legislative Code 293 and Minnesota Rules 7030.
7. This approval shall be for a test period that shall expire on May 27, 2013, after which the applicant may apply for permanent approval under the specific new zoning code language adopted pursuant to the current study of zoning code amendments to address issues specific to wind turbines and conditions under which wind turbines shall be permitted in various zoning districts, or the turbines shall be removed.

DETERMINATION OF SIMILAR USE APPLICATION



Department of Planning and Economic Development
Zoning Section
1400 City Hall Annex
25 West Fourth Street
Saint Paul, MN 55102
(651) 266-6589

Zoning office use only

File no. 11-129965

Fee 700.00

Tentative hearing date: 5-5-11

PD-6

252923230063

APPLICANT

Name Capitol Lien + Title / Tony Magnotta
Address 1010 North Dale Street
City St. Paul St. MN Zip 55117 Daytime phone 651-488-0300
Name of owner (if different) —
Contact person (if different) — Phone —

PROPERTY LOCATION

Address/Location 1010 North Dale Street
Legal description: Lots 3, 4, 5, 6, 7 + 8 of Compo-Prospect Add. Current Zoning B-3
(attach additional sheet if necessary)

REQUEST: Application is hereby made under the provisions of Chapter 61, Section 106 of the Zoning Code for a Determination of Similar Use.

Current use Office Building
Proposed use Office Building powered by Wind turbines

SUPPORTING INFORMATION: Provide the following information (attach additional sheets if necessary).

☒ Is the use similar in character to one or more of the principal uses permitted in the zoning district?

Yes, the proposed use of small Vertical wind turbines, VWAT's are similar to cell phone towers + light standards.

☒ Is the traffic that the use will generate similar to traffic generated by one or more permitted uses?

There may be a slight increase in traffic from interested parties.

☐ Is the use already permitted in a less restrictive zoning district?

No - St. Paul has no Zoning for Wind Turbines.

Required site plan is attached ☒

Applicant's signature [Signature]

Date 4-12-11

City agent pdd

4-12-11

MINNESOTA WIND TECHNOLOGY

1010 North Dale Street
Saint Paul, Minnesota 55117
(651) 214-6320
Dann@MnWind.US

April 12, 2011

Mr. Allan Torstenson
City of Saint Paul
Department of Planning and Economic Development
Zoning Section
1400 City Hall Annex
Saint Paul, Minnesota 55102

Dear Mr. Torstenson,

Attached please find, pursuant to our discussions with City staff, Capital Lien and Title's Application for Determination of Similar Use, for 4 vertical wind turbines, (VWAT's) at 1010 North Dale Street.

Along with our Application you will find pictures of the proposed VWATs, a site plan, and engineering plans for both the pole in the parking lot and the 3 roof mounted units. In answer to the questions Kate Riley had, the parking lot pole for the DS3000 will be 13 feet tall. In regards to the cut-off speed, that is 33 MPH. Supporting documentation is attached.

Lastly, since the issues of noise and sound levels have been raised, you will find sound testing data and certification by TUVNel.

If you need any additional data, please don't hesitate to contact us.

Thanking you again, for your cooperation and assistance in this manner, we remain,

Respectfully yours,



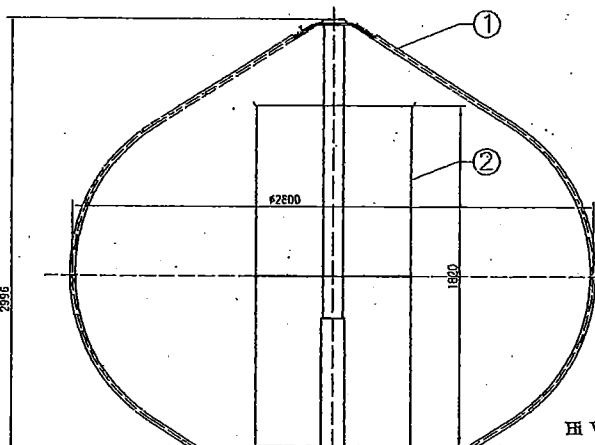
Daniel D. Dobson J.D.
Vice-President of Governmental Relations

Cc: Tony Magnotta – Capitol Lien and Title
Jay Nygard - Minnesota Wind Power

* 1.5 KW GENERATOR

8-8 11 *

2995



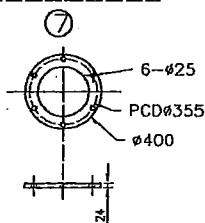
HI Vawt
Customer

Supply by
HI-vawt

Prepared by
Customer

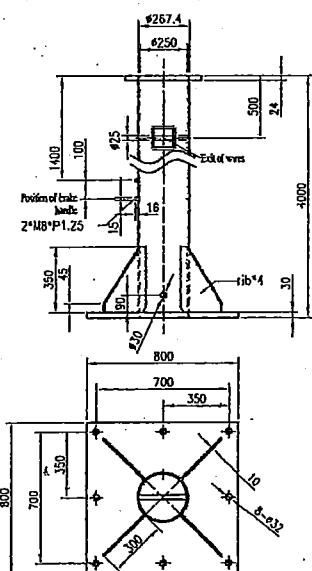
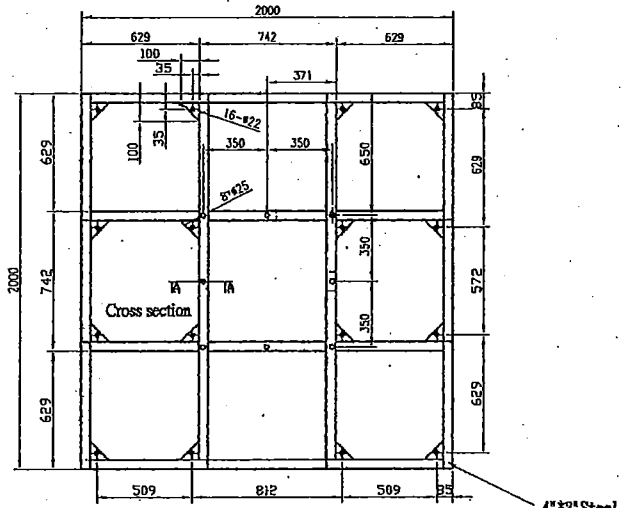
740"

18"



100*37*12L
Steel plate

Cross section A-A



Galvanizing by dipping-400g/m²

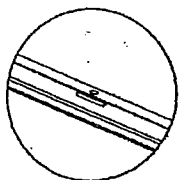
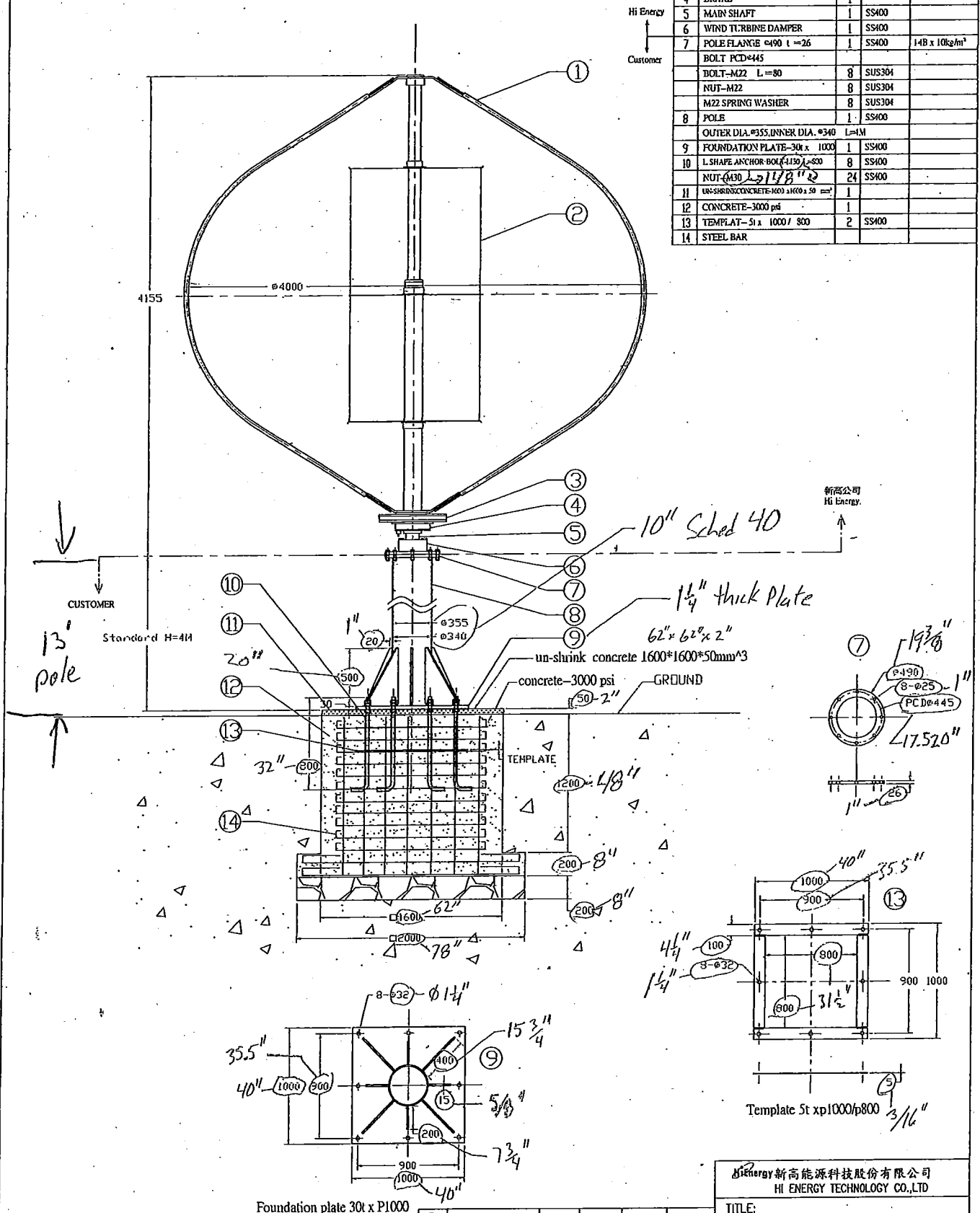


Image of welding of bottom stands

| MATERIAL LIST | | | | |
|---------------|------------------------------------|-----|----------|------------|
| NO | DESCRIPTION | QTY | MATERIAL | REMARK |
| 1 | DARREIUS BLADE | 3 | A6063/T3 | |
| 2 | SAVONIUS BLADE | 4 | A6061P | |
| 3 | GENERATOR | 1 | | |
| 4 | BRAKE | 1 | | |
| 5 | TURBINE AXIS | 1 | SS400 | |
| 6 | FIXING STAND | 1 | SS400 | |
| 7 | FLANGE $\phi 400$ t=24 | 1 | SS400 | 108x10x10t |
| | FIXING BOLT PCD $\phi 355$ | | | |
| | HEXAGON FIXING BOLT M22 L=90 | 6 | SUS304 | |
| | SCREW HEAD M22 | 6 | SUS304 | |
| | M22 SPRING WASHER | 8 | SUS304 | |
| 8 | POLE | 1 | SS400 | |
| | OD $\phi 267.4$ ID $\phi 250$ L=40 | | | |
| 9 | BOTTOM STAND 300 ϕ 800 | 1 | SS400 | |
| 10 | BOTTOM FLANGE $\phi 2000$ | 1 | SS400 | |
| 11 | CHEMICAL SCREW BOLT M16 $\phi 150$ | 16 | | |
| 12 | MECHANICAL BRAKE | 1 | | |

| | | | | | | | |
|-----|------|--------------------------|-------|-----------|----------|---|--|
| | | | | FINISHING | | VAWT 新高能源科技股份有限公司 HI VAWT TECHNOLOGY CO., LTD. | |
| | | | | MATERIAL | | | |
| | | | | APPROVED | 10/20/09 | | |
| SYN | DATE | DESCRIPTION OF REVISIONS | DRAWN | APPROVED | CHECKED | PART NO. | F-00032 |
| | | | | DESIGNED | | TITLE | DS-1500 FLAT ROOF INSTALLATION DIAGRAM |
| | | | | DRAWN | Omar | DRAWING NO. | |

| MATERIAL LIST | | | | |
|---------------|--|-----|----------|---------------------------|
| NO | DESCRIPTION | QTY | MATERIAL | REMARK |
| 1 | DARRIUS BLADS | 3 | A6063/T3 | |
| 2 | SAVONIUS BLADS | 4 | A6061P | |
| 3 | GENERATOR | 1 | | |
| 4 | BRAKE | 1 | | |
| 5 | MAIN SHAFT | 1 | SS400 | |
| 6 | WIND TURBINE DAMPER | 1 | SS400 | |
| 7 | POLE FLANGE $\phi 490$ L=26 | 1 | SS400 | 14B x 10kg/m ³ |
| | BOLT PCD=445 | | | |
| | BOLT-M22 L=80 | 8 | SUS304 | |
| | NUT-M22 | 8 | SUS304 | |
| | M22 SPRING WASHER | 8 | SUS304 | |
| 8 | POLE | 1 | SS400 | |
| | OUTER DIA. $\phi 355$ INNER DIA. $\phi 340$ L=4M | | | |
| 9 | FOUNDATION PLATE-30t x 1000 | 1 | SS400 | |
| 10 | L-SHAPE ANCHOR BOLT-1130 L=800 | 8 | SS400 | |
| | NUT- $\phi 430$ L=211/8" | 24 | SS400 | |
| 11 | UN-SHRINK CONCRETE-3000 x 1000 x 50 mm | 1 | | |
| 12 | CONCRETE-3000 psi | 1 | | |
| 13 | TEMPLAT-5t x 1000 / 800 | 2 | SS400 | |
| 14 | STEEL BAR | | | |



| | | | | | | | | | |
|-----|-------------|-------|---------|---------|----------|-------|------|-----------|----------|
| 3 | | | | | | | | | |
| 2 | | | | | | | | | |
| 1 | | | | | | | | | |
| 0 | FOR CHK | Ginny | Michael | Michael | 07/03/12 | SCALE | UNIT | PROJ. NO. | DWG. NO. |
| REV | DESCRIPTION | BY | CHK | APPR | DATE | | mm | DS TYPE | |

Hi Energy 新高能源科技股份有限公司
HI ENERGY TECHNOLOGY CO., LTD

TITLE:
DS-3000 Installation

Erickson Roed & Associates

Structural Engineers

2550 University Avenue West Ste 201-S

Saint Paul, Minnesota 55114-1904

Telephone: 651-251-7570

Facsimile: 651-251-7578

Project Report:

PROJECT: 1010 North Dale Street Wind Turbine Support

TO: Thom Ritchie
Go Green Energy, LLC
1386 Rest Point Road
Orono, MN 55364

DATE OF REPORT: 12/21/10

ER COMMISSION NO: 2010312-00

Project Location: Capitol Lein
1010 North Dale Street
St. Paul, MN 55117

I. PROJECT INFORMATION:

- A. This report summarizes the findings of Erickson Roed & Associates as related to the installation of three (3) 1.5 kw wind turbines on the roof of the existing structure located at the address noted above.

II. WIND TURBINE INFORMATION (from installer and manufacturer):

- A. The wind turbines shall be model DS-1500 as manufactured by Hi-Vawt Technology Co.
- B. The wind turbine will be installed at an elevation approximately 6'-0" above the roof of the existing structure.
- C. The support of the turbine shall be a 10" Diameter pipe and will have a circular cap plate with six (6) bolts as directed by the turbine manufacturer.
- D. Everything above the circular cap plate is to be provided by the turbine manufacturer.
- E. The area of the turbine that is "solid" is approximately 35% of the total area of the turbine head.

III. EXISTING BUILDING INFORMATION:

- A. The existing building is a 100' x 75' one story structure with full basement.
- B. The original construction was completed in 1961 or 1962 per the building owner.
- C. It is constructed as follows:
 - a. The roof is 3 bays (25'-0" each) framed using steel roof deck on 14" steel bar joists supported by 16" deep wide flange steel beams and 4" diameter steel pipe columns. Columns are believed to be spaced at approximately 20'-0" oc.
 - b. The exterior walls are 12" concrete block.

- c. The main floor level is precast plank/topping supported by wide flange steel beams and steel columns.
- d. Foundation information is not known at this time.

IV. SUPPORT OF WIND TURBINES ON EXISTING ROOF:

- A. See attached sheet S1 for a partial roof framing plan.
- B. Attach a 10" Diameter – Schedule 40 pipe to the existing steel beam using two steel angles/steel plate as shown in the attached "Section A" on sheet S2.
- C. Install angle kickers/ tube header as shown in "Section A" on sheet S2 on both sides of steel pipe per partial roof framing plan on sheet S1.
- D. Note the following information:
 - a. All steel angles and plates shall be ASTM A36 steel ($F_y = 36$ ksi).
 - b. All steel pipe shall be ASTM A53 – Grade B steel ($F_y = 35$ ksi)
 - c. All steel tubes shall be ASTM A500 – Grade C steel ($F_y = 46$ ksi)
 - d. All welding shall be performed by AWS certified welders using E70xx electrodes.

V. DISCLAIMERS:

- A. The opinions and recommendations contained in this report are based on the information provided to Ericksen Roed & Associates, as noted above, and on the calculations which were performed based on the information.
- B. This report applies only to those items noted above and do not reflect any conditions of the existing structure beyond that which is noted above.
- C. Ericksen Roed & Associates shall not be responsible for the means, methods, procedures, techniques or sequences of construction, nor for safety on the job site, nor shall Ericksen Roed & Associates be responsible for the Contractor's failure to carry out the work in accordance with the contract documents.

If you have any questions concerning the above information, or if we may be of further assistance to you, Please feel free to contact us.

Submitted by,

James A. Krzoska, PE
William T. Buller, PE, SE
ERICKSEN ROED AND ASSOCIATES

cc: Tony Magnotta
CEO/ Capitol Lien
1010 North Dale Street
St. Paul, MN 55117

Ericksen Roed & Associates

Structural Engineers

Saint Paul Office
2550 University Avenue West, Ste. 201-S
Saint Paul, Minnesota 55114-1904
Telephone: 651-251-7570
Facsimile: 651-251-7578

Bau Claire Office
3618 Oakwood Hills Parkway, Ste. #1
Bau Claire, Wisconsin 54701
Telephone: 715-552-5336
Facsimile: 715-552-5373

Page No. SZ

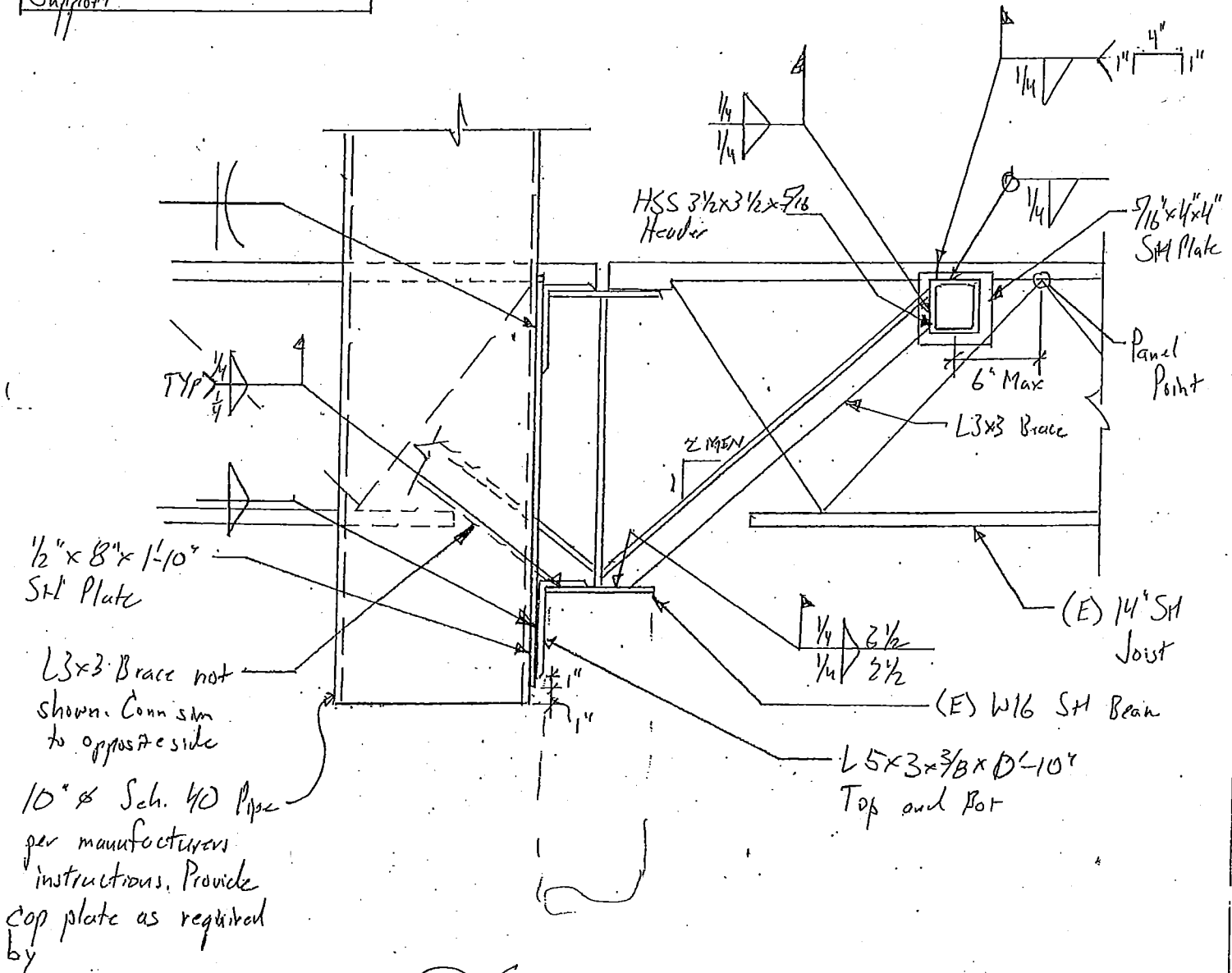
Job 1010 N. Dale St.

Comm. No. 2010312-00

Date 12/17/10

Name JAK

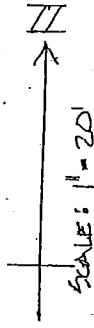
Note: Remove and replace
Steel roof deck as
required to install turbine
Support.



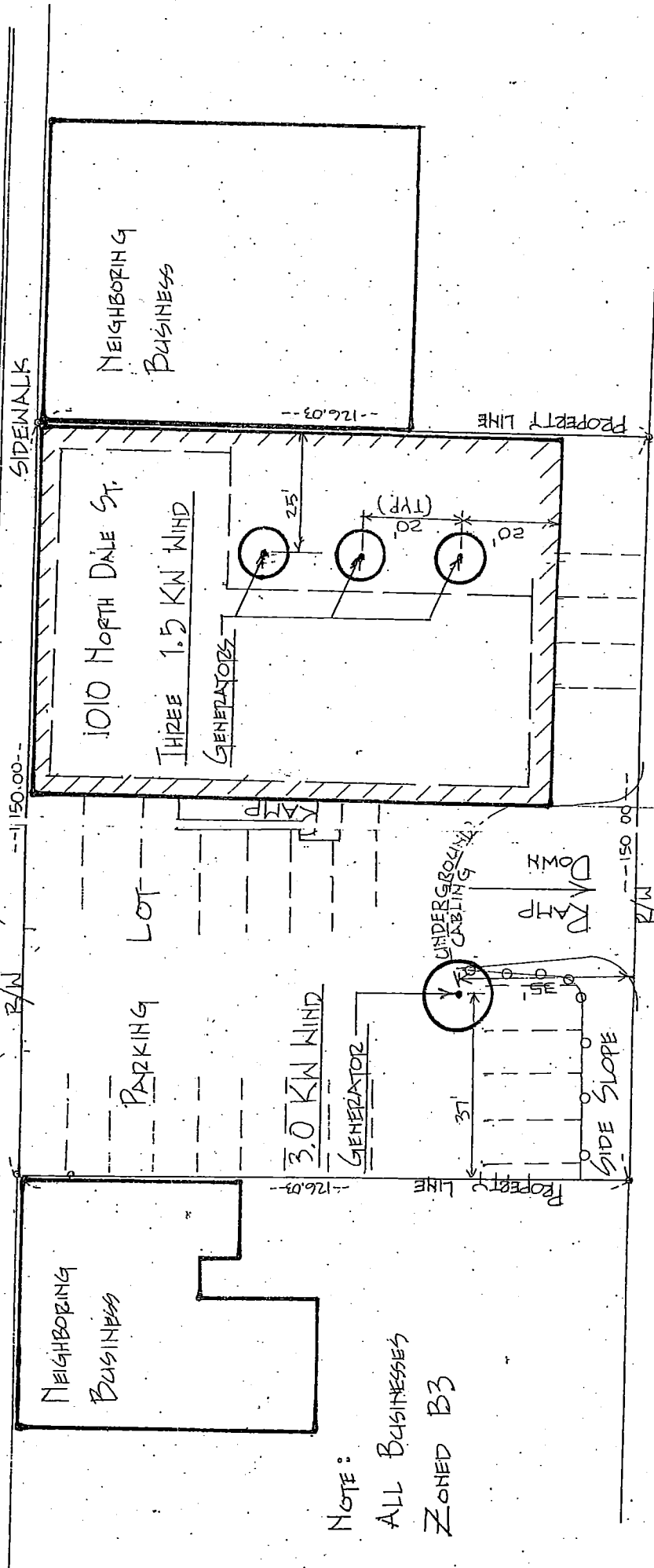
(A) Section

ZONED K4-

NORTH DALE STREET



CHAS & GIBBER



NOTE:
ALL BUSINESSES
ZONED B3

ZONED RM2

PROPOSED SITE IMPROVEMENTS
1010 NORTH DALE STREET

THOM 3.29.2011

Kate Reilly - 14 day continuance for 1010 North Dale Vertical Wind Turbines

From: Dann Dobson <dann.dobson@gmail.com>
To: "Allan Torstenson - City of St. Paul - PED - Principal Planner"
<allan.torstenson@ci.stpaul.mn.us>, "Kate Reilly - City of St. Paul - PED"
<Kate.Reilly@ci.stpaul.mn.us>
Date: 5/5/2011 2:18 PM
Subject: 14 day continuance for 1010 North Dale Vertical Wind Turbines
CC: Dann Dobson <dann.dobson@gmail.com>, Tony Magnotta - Capitol Lien
<TonyM@capitollien.com>, <tony@mnwind.us>, Jay Nygard <jay@mnwind.us>, Jay
Nygard <jaynygard@yahoo.com>, thom ritchie <sueandthomritchie@hotmail.com>, Thom
Ritchie <thom@mnwind.us>, Milt Nordmeyer <menlegal@yahoo.com>, Milt Nordmeyer
<milt@mnwind.us>

Dear Mr. Tortenson and Ms. Reilly -

Pursuant to our discussion earlier today, Mr. Tony Magnotta wishes to layoff, or continue his application for Determination of Similar Use for his Vertical Wind Turbines at 1010 North Dale for 14 days, or until May 19th.

We are aware of and understand the statutory requirements found in Minnesota Statute 15.99 (1995) require the City of Saint Paul to approve or deny this application within sixty days of it's submission. We desire to extend the sixty day period for 14 days to accommodate the continuance, we are requesting.

Daniel Dobson
Minnesota Wind Technology
Representative for Applicant Tony Magnotta

From: Dann Dobson <dann.dobson@gmail.com>

Date: May 26, 2011 11:34:54 AM CDT

To: "Jon Commers - Chair - St. Paul Planning Commission" <commers@donjek.com>, Pat Connolly <pconnolly@visi.com>, Anthony Fernandez <aif@anthonyfernandez.com>, Gene Gelgelu <gggelgelu@aeds-mn.org>, "Brianna Halverson - St. Paul Regional Labor Federation" <bhalverson@stpaulunions.org>, Christopher Ochs <Christopher.james.ochs@gmail.com>, Trevor Oliver <oliv0082@gmail.com>, Trevor Oliver <toliver@kellyandlemons.com>, Julie Perrus <jperrus@larkinhoffman.com>, "Marilyn J. Porter" <porterbolan85@aol.com>, Elizabeth Reveal <ecr@trios-llc.com>, Anthony Schertler <tschertler@springsted.com>, Robert Spaulding <bob.spaulding@yahoo.com>, Terri Thao <tthao@nexuscp.org>, "Daniel O. Ward II" <thebethelgroup@yahoo.com>, "Barbara A.Wenci" <bwenci@msn.com>, David Wickiser <wickiser@comcast.net>

Cc: Dann Dobson <dann.dobson@gmail.com>, Tony Magnotta - Capitol Lien <TonyM@capitollien.com>, "Kathy Lantry - St. Paul City Council" <Kathy.Lantry@ci.stpaul.mn.us>, Dave Thune <dave.thune@ci.stpaul.mn.us>, "Dan Bostrom - St. Paul City Council" <Dan.Bostrom@ci.stpaul.mn.us>, "Pat Harris - St. Paul City Council" <Pat.Harris@ci.stpaul.mn.us>, "Melvin Carter - St. Paul City Council" <Melvin.Carter@ci.stpaul.mn.us>, "Lee Helgen - St. Paul City Council" <Lee.Helgen@ci.stpaul.mn.us>, "Russ Stark - St. Paul City Council" <russ.stark@ci.stpaul.mn.us>, "Mayor Chris Coleman - City of St. Paul" <Chris.Coleman@ci.stpaul.mn.us>, "Ann Hunt - City of St. Paul - Mayors Office" <ann.hunt@ci.stpaul.mn.us>, "Ellen Biales - St. Paul City Council" <ellen.biales@ci.stpaul.mn.us>, "Pat Lindgren - St. Paul City Council" <Patricia.Lindgren@ci.stpaul.mn.us>

Subject: Vertical Wind Turbine Project at 1010 North Dale Street - 2nd draft of letter to Planning Commission

Dear Members of the Saint Paul Planning Commission -

On Friday, May 27th, you will be asked to vote on a new and innovative project in Saint Paul.

Tony Magnotta, the owner of Capitol Lein and Title is proposing to put 4 vertical access wind turbines (VAWT's) on his building and parking lot at 1010 North Dale Street. The plan anticipates three 1.5 kilowatt (1500 watts) turbines will be placed on the roof and a fourth 3.0 KW (3000 watt) turbine will be placed on a 15 foot pole in the parking lot. This should allow Mr. Magnotta to become the first business in Saint Paul to become free of the energy grid when he is able to produce his own free electricity.

Regrettably the zoning committee rejected our proposal by a 4 to 3 vote, claiming that vertical wind turbines are not similar to cell phone towers, even though this was the exact procedure used by Macalester College back in 2002, when they requested permission to put up their 10 kilowatt wind turbine on a 100 foot pole.

All we are asking is that the Planning Commission grant us a two year trial, exactly as was granted Macalester College 9 years ago. We agree that should noise, or any other disruption, ever becomes an issue, which we will absolutely guarantee will not occur, we will agree to remove the turbines.

If you come and visit our demonstration turbines, presently in operation, at 1010 North Dale or Lake Minnetonka in Orono, you will clearly see that a single car driving by on Dale Street is infinitely louder than these turbines. You will be able to stand under either turbine, while it is fully spinning and hold a conversation in a normal voice. You will also hear, or rather be unable to even hear, these turbines at the property lines.

We will stake our reputations that a single car going by on Dale Street will be louder than these four turbines when they were fully installed, operational, spinning and producing free electricity.

Further, to allay any and all concerns, we have agreed to do a noise study, identical to the Macalester Study. As Mr. Magnotta testified before the Zoning Committee, we are in the process of hiring Al Perez, the sound engineer formerly with the Minnesota PCA, who was largely responsible for writing the Minnesota Noise Code. Mr. Perez worked for the City of St. Paul DSI as an expert witness for the City in the 7th Street Ethanol Plant noise case. He came highly recommended to us by counsel for the Saint Paul Port Authority.

That said, if one goes back and reviews the Macalester Noise Study, you will find that the engineer could not get any sound readings from the Macalester Turbine, due to the ambient noise level from Snelling Avenue. The

Macalester turbine is 3 1/3 times larger than the biggest turbine Mr. Magnotta wishes to install, 10KW vs. 3 KW (10,000 watts vs. 3,000 watts) and is situated 3 times as high, 100 feet versus 30 feet. To a reasonable degree of certainty we can predict that the result of the wind study at 1010 North Dale, will be the same as the Macalster wind study. Since Dale Street is over 200 feet closer to the proposed turbines, than Snelling Avenue is to the Macalster turbine, the ambient noise from Dale Street will be far louder than any noise ever produced by these turbines.

Any noise Mr. Magnotta's turbines produce, which we estimate will be in the 30 to 45 db range, will not even be heard on any adjacent properties, as well as being easily drowned out by the noise from Dale Street.

We must also note that our project was unanimously endorsed by the local District Council and has the support of the neighborhood. On May 8th we held an open house to which all neighbors in a one block radius were invited, where they could view the demonstration turbine in operation. Several City staff members attended this event including Kate Reilly and Bill Gunther. Everyone was surprised how the turbine, albeit spinning slowly that evening, virtually produced no noise. At the open house, all neighbors were informed of the Zoning Committee hearing and not a single neighbor came, spoke in opposition, or wrote anything in opposition, even though they would be the ones most immediately effected by this project.

In the meantime, since the public hearing has already taken place, we invite all Committee Members to view our demonstration unit at 1010 North Dale Street, anytime, day or night, or feel free to contact me or Jay Nygard to schedule a visit at Jay Nygard's home to view his 1.5 kilowatt unit out on Lake Minnetonka in Orono.

These turbines are in use throughout Asia, India and Europe, as well as here in the United States at high schools in New Bedford, Massachusetts and Claredon Hills, Illinois.

I have attached several videos that show identical turbines throughout the world, (except the noise video) as well as the two demonstration turbines already operating here in Minnesota. In a number the attached videos you will see that they are even positioned on the top of apartment buildings, no different than cell phone towers. In the second video the VAWT is an integral part of the Samsung Zero Energy Home.

Hi-VAWT Wind System examples around the world

<http://www.youtube.com/watch?v=CUWBJYIcUrg>

Hi-VAWT wind system in Samsung Zero Energy House

<http://www.youtube.com/watch?v=hxzDdPVkvFk&feature=related>

Do Wind Turbines Make Noise?

http://www.youtube.com/watch?v=JD0v9_zV2uk

All we ask is to be given the opportunity to demonstrate that this pollution free, energy creating technology works, without noise and without disturbing neighbors. We agree to and welcome a 2 year trial.

You can help lead St. Paul into this new 21st century adventure or we can continue to be slaves of Xcel Energy and the other big energy companies. We are offering a new way to energy independence as energy prices reach all time highs.

Lastly we failed to mention, because we did not think it was necessary to do so, but it is our intention to build these systems in Minnesota in the near future. We would prefer to locate our factory and the accompanying jobs in St. Paul. Part of our determination of where we locate our plant will be how accepting the community is.

We thank you in advance for your open minded attitudes and progressive thinking. We hope that rather than reject our small part of the solution for energy independence, you will embrace this plan and help us make Saint Paul the vertical wind turbine capitol of North America.

Respectfully yours,

Daniel D. Dobson J.D. - Vice-President of Government Relations

Milton Nordmeyer J.D. - General Counsel

Minnesota Wind Technology

1010 North Dale Street

St. Paul, Minnesota 55116

651-214-6320



District 6 Planning Council

171 Front Avenue
Saint Paul, MN 55117
651-488-4485 fax: 651-488-0343
district6ed@dist6pc.org

April 28, 2011

Zoning Committee of the Planning Commission
1400 City Hall Annex
25 West 4th Street
Saint Paul, MN 55102

RE: Capitol Lien and Title-Tony Magnotte-1010 North Dale Application for Determination that vertical wind turbines are uses similar to cell phone antennas

District 6 Planning Council's Land Use Task Force met with the applicants concerning the above referenced application on April 27, 2011. After the presentation and discussion the Land Use Task Force unanimously recommends approval of the Determination of Similar Use permit.

If you have any questions please contact the office at the numbers above and thank-you for your consideration of District 6 Land Use Task Force's recommendation.

Regards

Jeff Martens

Jeff Martens Land Use Task Force Chairman

Cc: Ward 5

An Affirmative Action Equal opportunity Employer

April 28, 2001

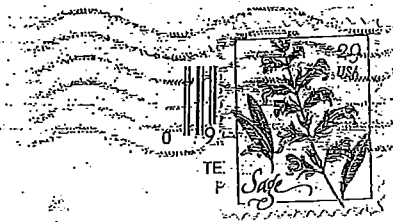
MINNESOTA
Please make this a part of the official record.
State Bird: Common Loon; Photo © Jerry Hennen
State Flower: Showy Lady's Slipper; Photo © Richard Haug



Mr Joe Marino
671 Simon Ave
Saint Paul, MN 55117



28-M



POST CARD

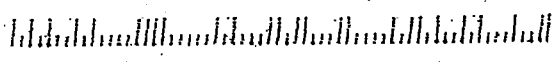
Address

Dear City Engineer,
I support vertical wind turbines. And I don't believe that they should follow the strict regulation of cell phone antennas (towers). Thank you,
Joe



DO NOT WRITE BELOW THIS LINE

City of St. Paul
Planning & Economic Devt
1400 City Hall Center
25 West 5th Street
St. Paul, MN 55102



Hi Energy DS3000 Specs

Rotor Specifications

| | |
|--------------------------|-------------------|
| Blade Diameter | 13.1.ft (4.0 m) |
| Height (Including Stand) | 18.4 ft (5.6 m) |
| Blade Number | 4 |
| Blades Material | Aluminum |
| Stand Material | SS400 |
| Cut-in Wind Speed | 5.5 mph (2.5 m/s) |
| Rated Wind Speed | 26.8 mph (12m/s) |
| Rated rpm | 180 rpm |
| Cut-out Wind Speed | 33.5 mph (15m/s) |
| Survival Wind Speed | 131 mph (60m/s) |
| Weight (Including Stand) | 1500 lbs. (680kg) |

Generator Specifications

| | |
|----------------|------------------------------|
| Generator Type | AC, 3 Phases Synchronism PMG |
| Rated Power | 3000 W |

Inverter System

MPPT, Over-speed Brake Control, Battery Charge

| | |
|----------------|-----------|
| Output Voltage | 48 V DC |
| Output Current | < 130 Amp |

Battery 12V, 100AH; Deep Cycle Lead-Acid Battery, Gel Type

Braking System

| | |
|---------------------------|--|
| Overspeed Braking Control | Automatic Short-Circuit Barking System |
| Manual Braking System | Drum Brake |

Operation Temperature

| | |
|---------------------|-------------|
| Ambient Temperature | -10 ~ 40 ? |
| Ambient Humidity | 95% Maximum |

Hi Energy DS1500 Specs

Rotor Specifications

| | |
|--------------------------|-------------------|
| Blade Diameter | 9.2 ft (2.8 m) |
| Height (Including Stand) | 9.8 ft (3.9 m) |
| Blade Number | 3 |
| Blades Material | Aluminum |
| Stand Material | SS400 |
| Cut-in Wind Speed | 5.5 mph (2.5 m/s) |
| Rated Wind Speed | 26 mph (12m/s) |
| Rated rpm | 250 rpm |
| Cut-out Wind Speed | 33 mph (15m/s) |
| Survival Wind Speed | 131 mph (60m/s) |
| Weight (Including Stand) | 772 lbs. (350kg) |

Generator Specifications

| | |
|----------------|------------------------------|
| Generator Type | AC, 3 Phases Synchronism PMG |
| Rated Power | 1500 W |

Inverter System

MPPT, Over-speed Brake Control, Battery Charge

| | |
|----------------|----------|
| Output Voltage | 48 V DC |
| Output Current | < 60 Amp |

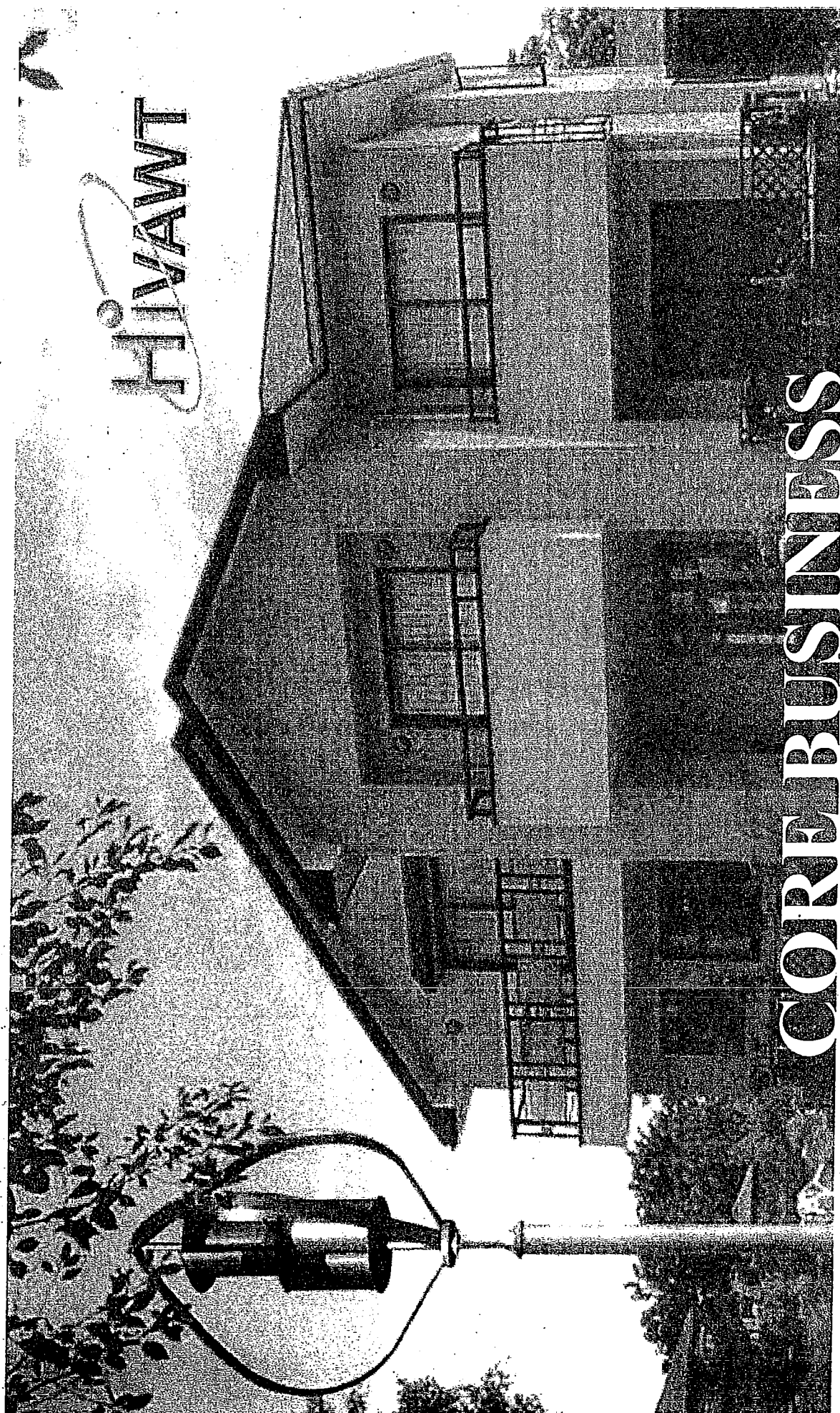
Battery 12V, 100AH; Deep Cycle Lead-Acid Battery, Gel Type

Braking System

| | |
|---------------------------|--|
| Overspeed Braking Control | Automatic Short-Circuit Barking System |
| Manual Braking System | Drum Brake |

Operation Temperature

| | |
|---------------------|-------------|
| Ambient Temperature | -10 ~ 40 ? |
| Ambient Humidity | 95% Maximum |



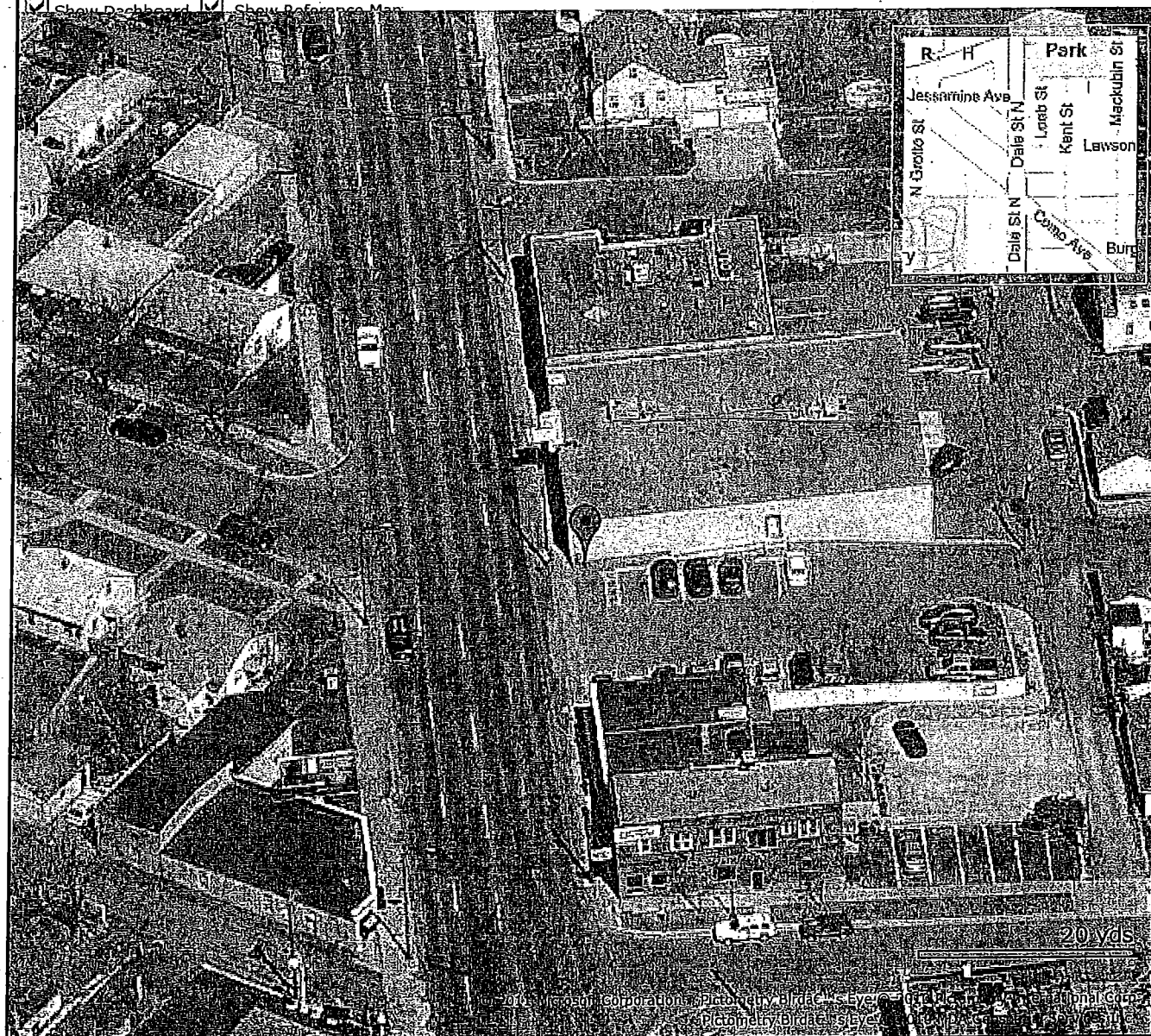
HAWAII

CORE BUSINESS

GISmo Oblique Photography

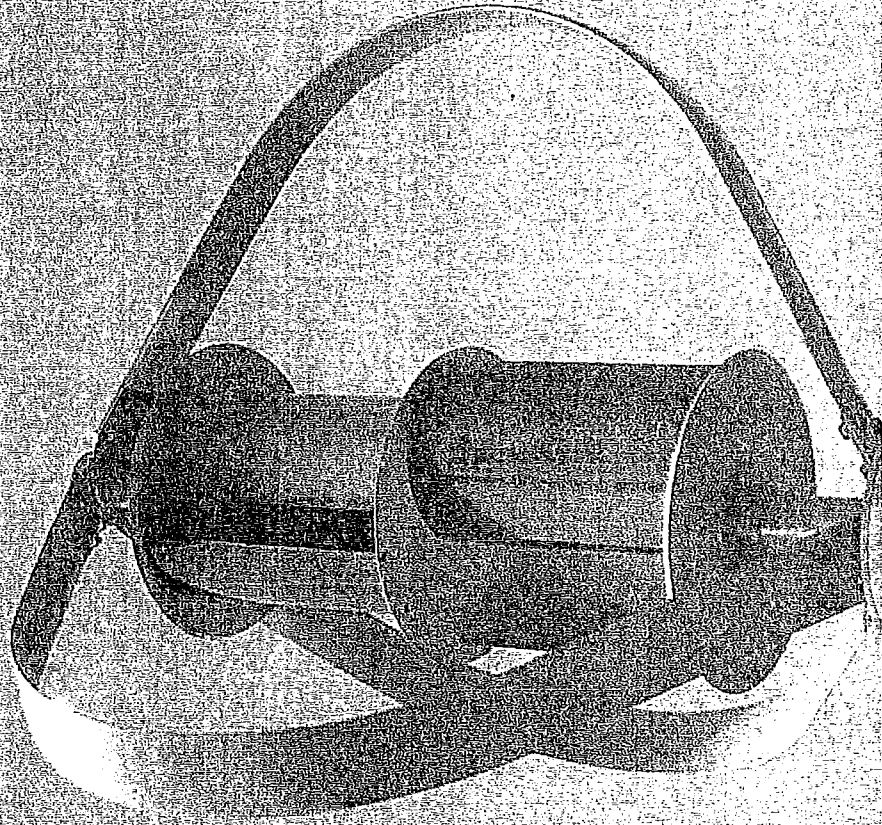
Images courtesy of: Microsoft® Virtual Earth™ 2006

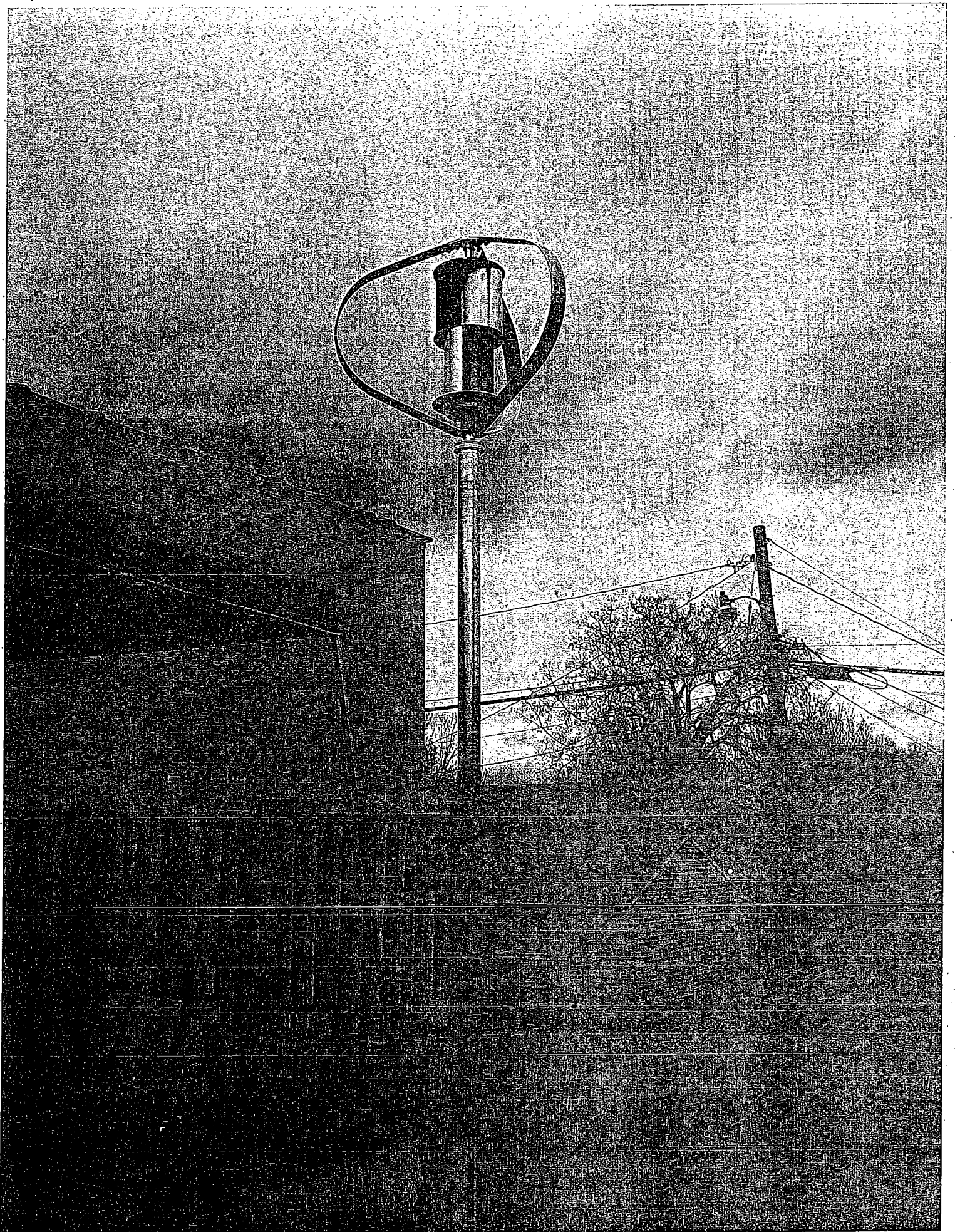
☒ Show Dashboard ☒ Show Reference Map



Hi-VAWT SWT

Create Blue Ocean Business for Renewable Energy





Small demonstration wind turbine



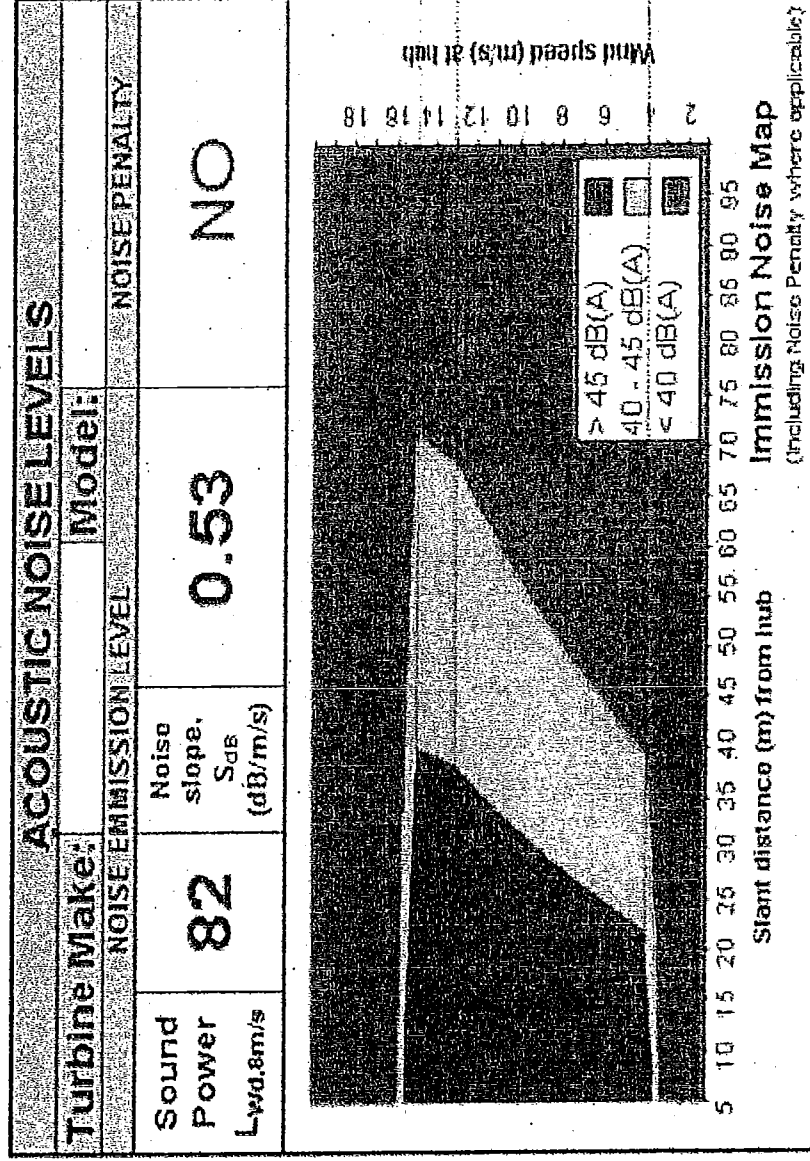
Darrius blade for 1.5 kW turbine (to be roof mounted)



Darrius blade for 3kW turbine (pole mounted)

Noise Test Became The Requirement Of SWT Standard

Noise Level no more than 45dB has become the essential standard for SWT; HASWT will face noise level problem

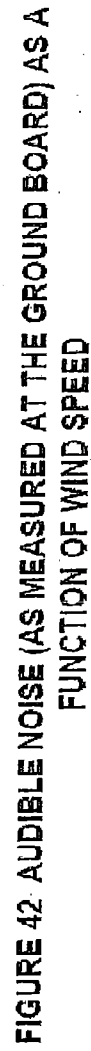


Cut-out wind speed

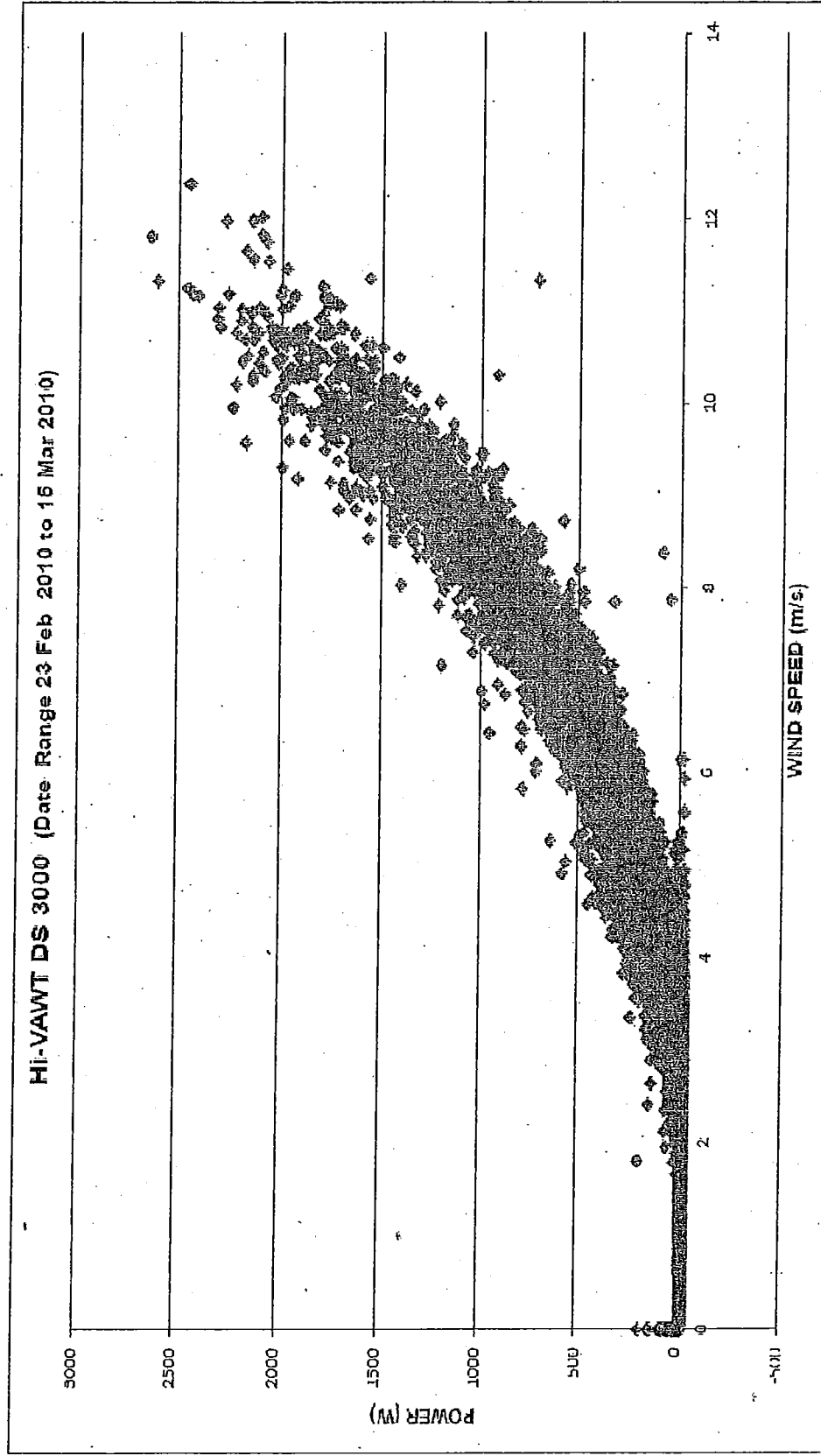
Speed Limiter start

Cut-in wind speed

Noise is less than 50dB in 5 m/s of wind speed
Noise is less than 65dB in 10 m/s of wind speed

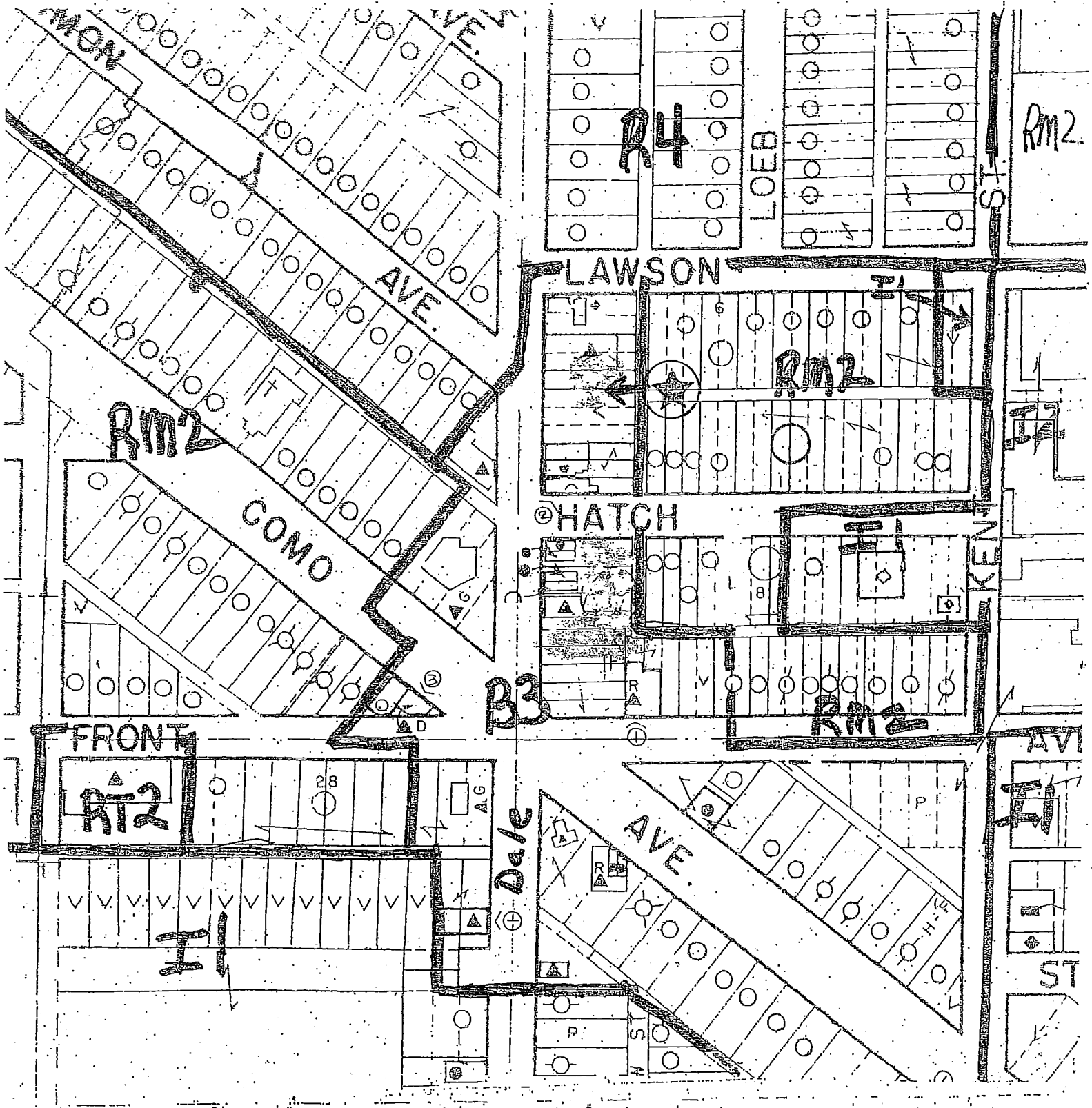


TUW_{nel} Tested Data



TUW_{NEL} Ref: H1E001

15/03/2010



APPLICANT Capitol Lein and title
 PURPOSE DSU
 FILE # 11-129965 DATE 4-14-11
 PLNG. DIST 6 Land Use Map # 12
 SCALE 1" = 100' Zoning Map # 9
Amended map

LEGEND

zoning district boundary

subject property

one family

two family

multiple family

commercial

industrial

vacant

north

ZONING COMMITTEE STAFF REPORT

1. **FILE NAME:** Nuchami Hurshuajer **FILE #**11-149-363
 2. **APPLICANT:** Nuchami Hurshuajer **HEARING DATE:** June 16, 2011
 3. **TYPE OF APPLICATION:** Nonconforming Use Permit-Reestablishment
 4. **LOCATION:** 393 Geranium Ave E, NW corner at Arkwright
 5. **PIN & LEGAL DESCRIPTION:** 292922220046; John Mongans Stewart Park Add Ex W 50 Ft
Lots 1 & 2 & All Of Lot 3
 6. **PLANNING DISTRICT:** 5
 7. **ZONING CODE REFERENCE:** §62.109(d) **PRESENT ZONING:** R4
 8. **STAFF REPORT DATE:** June 9, 2011 **BY:** Sarah Zorn
 9. **DATE RECEIVED:** June 1, 2011 **60-DAY DEADLINE FOR ACTION:** July 31, 2011
-

- A. **PURPOSE:** Re-Establishment of nonconforming use as a duplex
- B. **PARCEL SIZE:** Irregular parcel; 50 ft. (Geranium) x 130 ft. (Arkwright) = 8,874 sq. ft.
- C. **EXISTING LAND USE:** R-Duplex
- D. **SURROUNDING LAND USE:**
 - North: Single family residential (R4)
 - East: Single and two family residential (R4)
 - South: Single family residential (R4)
 - West: Single family residential (R4)
- E. **ZONING CODE CITATION:** §62.109(d) lists the conditions under which the Planning Commission may grant a permit to re-establish a nonconforming use.
- F. **HISTORY/DISCUSSION:** There is no zoning history specific to this property.
- G. **DISTRICT COUNCIL RECOMMENDATION:** The District 5 Council had not commented at the time this report was prepared.
- H. **FINDINGS:**
 1. The property was placed on the Vacant Building list in April of 2009 as a Category 2 and has been vacant for more than 365 days, requiring the applicant to re-establish the duplex use. The applicant is proposing to rehabilitate the structure as a two-family dwelling and rent it out.
 2. Section 62.109(e) states: *When a nonconforming use of a structure, or structure and land in combination, is discontinued or ceases to exist for a continuous period of three hundred sixty-five (365) days, the planning commission may permit the reestablishment of a nonconforming use if the commission makes the following findings:*
 - (1) *The structure, or structure and land in combination, cannot reasonably or economically be used for a conforming purpose.* This finding is met. According to city records the property has been registered in the past as a two-unit structure and information provided by the applicant shows that the structure is configured as such. In addition, the land use map from the 1960s shows the property as a duplex. Conversion to a single family dwelling would force the applicant to incur significant costs.
 - (2) *The proposed use is equally appropriate or more appropriate to the district than the previous nonconforming use.* This finding is met. The proposed use as a duplex is equally appropriate to the district as the previous duplex use.
 - (3) *The proposed use will not be detrimental to the existing character of development in the immediate neighborhood or endanger the public health, safety, or general welfare.* This finding is met. The proposed use will not be detrimental to the existing character of development in the immediate neighborhood. Re-establishing the nonconforming use will put a structure back into service that has been vacant for the last two years. The proposed

continued use of the duplex structure fits in with the surrounding neighborhood and adjacent single and two family structures.

- (4) *The proposed use is consistent with the comprehensive plan.* This finding is met. The Housing Chapter of the Comprehensive Plan supports an increase in housing choice (strategy H1.1) across the city to support economically diverse neighborhoods.
 - (5) *A notarized petition of two-thirds of the property owners within one hundred (100) feet of the property has been submitted stating their support for the use.* This finding is met. The petition was found sufficient on June 1, 2011: 16 parcels eligible; 11 parcels required; 11 parcels signed.
3. The Planning Commission has established guidelines for applications for nonconforming use permits for duplexes. While not themselves requirements, these guidelines lay out additional more objective factors the Planning Commission wishes to consider in determining if the required findings for granting nonconforming use permits listed in §62.109 of the Zoning Code can be made. The Planning Commission's Duplex Conversion Guidelines state that for applications for nonconforming use permits for duplexes in residential districts, staff will recommend denial unless the following guidelines are met:
- A. *Lot size of at least 5000 square feet with a lot width or front footage of 40 feet.* This finding is met. The lot size is approximately 8,800 sq. ft. and the lot frontage on Geranium is 50 feet.
 - B. *Gross living area, after completion of duplex conversion, of at least 1,500 square feet. Neither unit shall be smaller than 500 square feet.* This condition is met. The units are approximately 1,075 square feet each.
 - C. *Three off-street parking spaces (non-stacked) are preferred; two spaces are the required minimum.* This condition can be met. There is only one off-street parking space, in the existing attached garage, serving the use. There is also plenty of room along Arkwright to place a parking pad. However, the property is located on a corner lot and on-street parking on Geranium and Arkwright is adequate to serve the use.
 - D. *All remodeling work for the duplex is on the inside of the structure unless the plans for exterior changes are approved by the Board of Zoning Appeals as part of the variance. (The Planning Commission will approve these changes for the cases they handle.)* This condition is met. Other than exterior finishing, all remodeling work will take place inside the structure.
 - E. *For the purpose of protecting the welfare and safety of the occupants of any structure that has been converted into a duplex without the necessary permits, a code compliance inspection shall be conducted and the necessary permits obtained to bring the entire structure into conformance with building and fire code standards; or the property owner must, as a condition of the approval, make the necessary improvements to obtain the necessary permits and bring the entire structure into building and fire code compliance within the time specified in the resolution.* This condition is met. The applicant will work with the Department of Safety and Inspections to obtain the necessary code compliance documentation and permits.

The application for the permit shall include the petition, a site plan meeting the requirements of section 61.401, floor plans, and other information as required to substantiate the permit. This finding is met. The applicant has submitted sufficient documentation to substantiate the permit.

- I. **STAFF RECOMMENDATION:** Based on the findings above, staff recommends approval of the Re-Establishment of nonconforming use as a duplex subject to the condition that the applicant adhere to all applicable code requirements and receives a certificate of occupancy for a two-unit building.



NONCONFORMING USE PERMIT APPLICATION
Department of Planning and Economic Development
Zoning Section
1400 City Hall Annex
25 West Fourth Street
Saint Paul, MN 55102-1634
(651) 266-6589

Zoning Office Use Only
File #: 11-149363
Fee: 700.00
Tentative Hearing Date: 6-16-11

20=5

#292922 22 0046

APPLICANT

Name Nuchami Hurshuager
Address 2415 Cypress St.
City Maplewood St: MN Zip 55109 Daytime Phone (651) 373-4700
Name of Owner (if different) Bank of New York As Trustee
Contact Person (if different) _____ Phone _____

PROPERTY LOCATION

Address/Location: 393 Geranium Ave. East
Legal Description John Mongans Stewart Park Addition Ex. W
50 FT Lots 1 & 2 & All of Lot 3 Current Zoning R4
(attach additional sheet if necessary)

TYPE OF PERMIT: Application is hereby made for a Nonconforming Use Permit under provisions of Chapter 62, Section 109 of the Zoning Code:

- The permit is for: ☐ Change from one nonconforming use to another (para. c)
☒ Re-establishment of a nonconforming use vacant for more than one year (para. e)
☐ Establishment of legal nonconforming use status for use in existence at least 10 years (para. a)
☐ Enlargement of a nonconforming use (para. d)

SUPPORTING INFORMATION: Supply the information that is applicable to your type of permit.

Present/Past Use Duplex
Proposed Use Duplex

Attach additional sheets if necessary

RECEIVED
MAY 25 2011
Per Sam

Attachments as required ☐ Site Plan ☒ Consent Petition ☐ Affidavit

Applicant's Signature [Signature] Date 5/12/11 City Agent [Signature]

5/25/11

**SUMMARY INFORMATION SHEET
FOR DUPLEX AND TRIPLEX COVERION CASES**

| Housing unit breakdown: | Existing | Proposed |
|----------------------------------|------------|-----------------|
| Number of units | 1 | 2 |
| Number of bedrooms in each unit | | |
| Unit 1 | 2 | 2 |
| Unit 2 | 2 | 2 |
| Unit 3 | | |
| Size of each unit in square feet | | |
| Unit 1 | 1075 sq ft | 1075 sq ft |
| Unit 2 | 1075 sq ft | 1075 sq ft |
| Unit 3 | | |
| Debt: | | |
| Initial principal amount | 42,675.00 | 42,675.00 |
| Initial interest rate | | — |
| Term of mortgage/debt financing | | CASH |
| Time remaining on note | | — |
| Balance on existing debt | | — |
| Rehabilitation | | Per City of |
| Type of Improvements: | | ST. PAUL |
| | | Code Compliance |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

**PRO FORMA INFORMATION SHEET
FOR DUPLEX AND TRIPLEX CONVERSION CASES
Continuation of Extra Units**

| Required information | With Continuation of Extra Units in Structure | With Conversion of Structure to Legal Number of Units |
|---|---|---|
| <u>Income</u> | | |
| Total monthly rent income for all units | 1,000.00 | 1,600.00 |
| Monthly income from structure other than rent | - | |
| Existing vacancy (if any) | 1 | 2 |
| Effective gross income (EGI) / month ¹ | \$ 1000.00 | \$ 1600.00 |
| Effective Gross Income / year | \$ 12,000.00 | \$ 19,200.00 |
| <u>Operating Expenses (Annual) ²</u> | \$ 6,298.00 | \$ 6,298.00 |
| Maintenance | 450.00 | 450.00 |
| Insurance | 925.00 | 925.00 |
| Utilities (only include amount paid by landlord) | 1,200.00 | 1,200.00 |
| Other (identify) | 325.00 | 325.00 |
| Taxes | 3,398.00 | 3,398.00 |
| <u>Net Operating Income (Annual) ³</u> | \$ 5,702.00 | \$ 12,902.00 |
| <u>Monthly debt / mortgage payment</u> | 0 | 0 |
| <u>Annual debt payment</u> | \$ 0 | \$ 0 |
| <u>Rehab projects</u> | | |
| Total cost of Improvements | 20,900.00 | 20,900.00 |
| Monthly rehab debt payment | 0 | 0 |
| <u>Annual rehab debt payment</u> | \$ 0 | \$ 0 |
| <u>Cash Flow: profit, (loss) ⁴</u> | \$ 5,702.00 | \$ 12,902.00 |

NOTE: 1. Effective Gross Income = (Total rent income) - (Vacancy, if there is any)

2. Operating expenses are the sum of the next five lines, incl maintenance, insurance, utilities, taxes and others

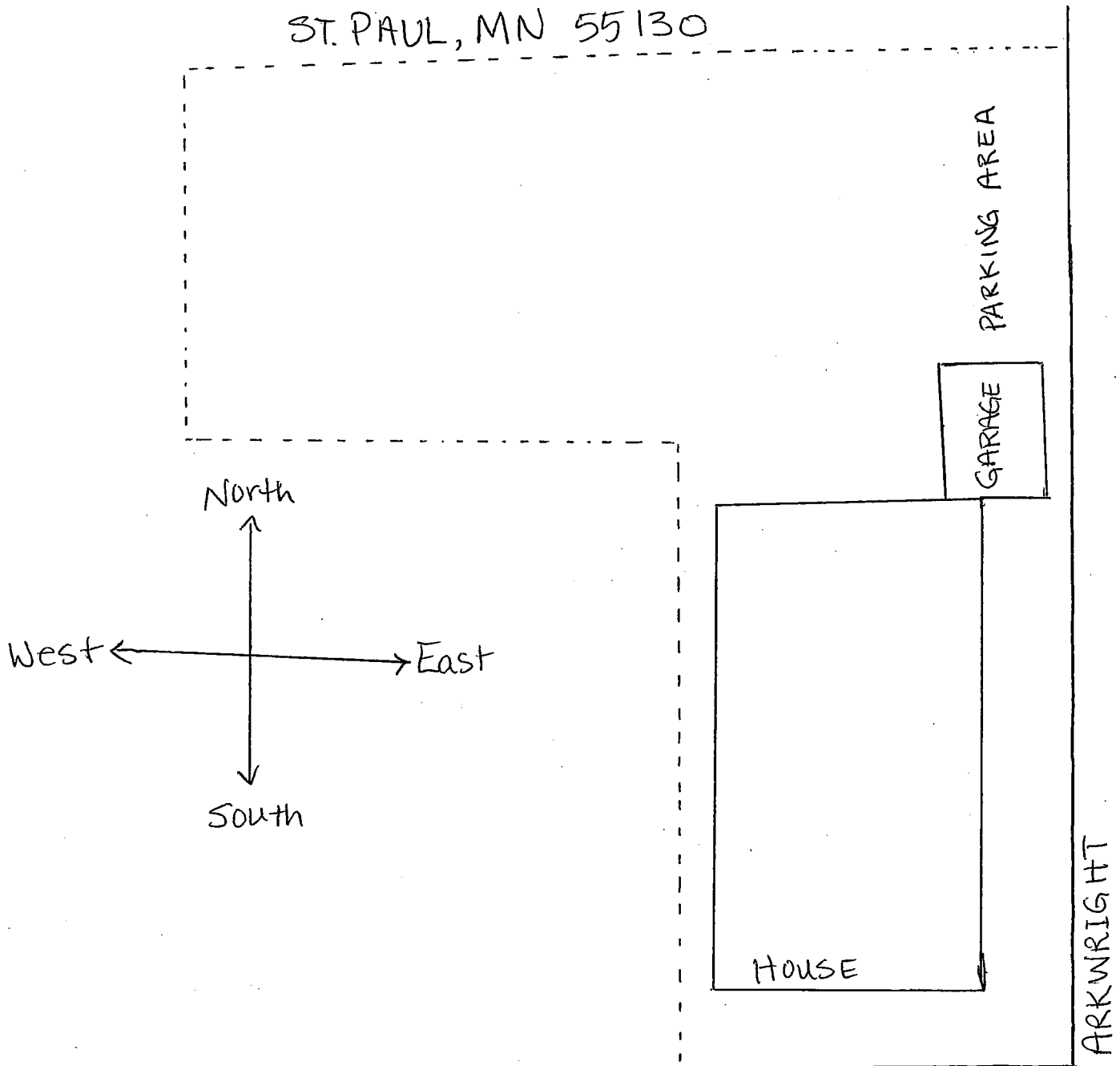
3. Net Operating Income = (Effective Gross Income) - (Operating Expenses)

4. Cash Flow = (Net Operating Income) - (Annual debt payment)

Site Plan

393 GERANIUM AVE.

ST. PAUL, MN 55130

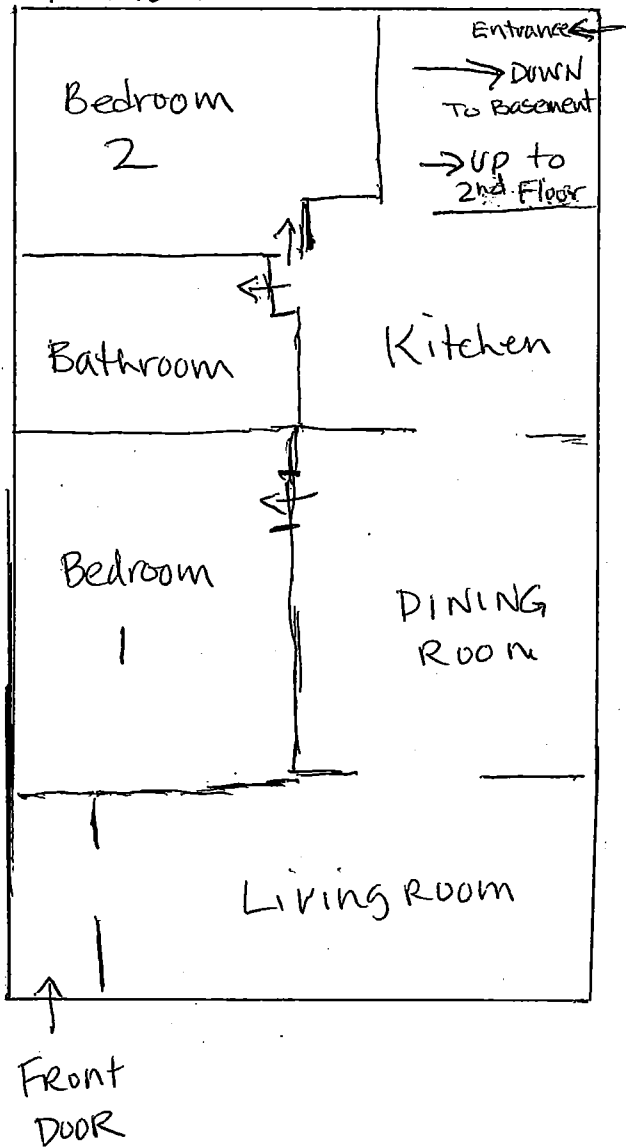


GERANIUM

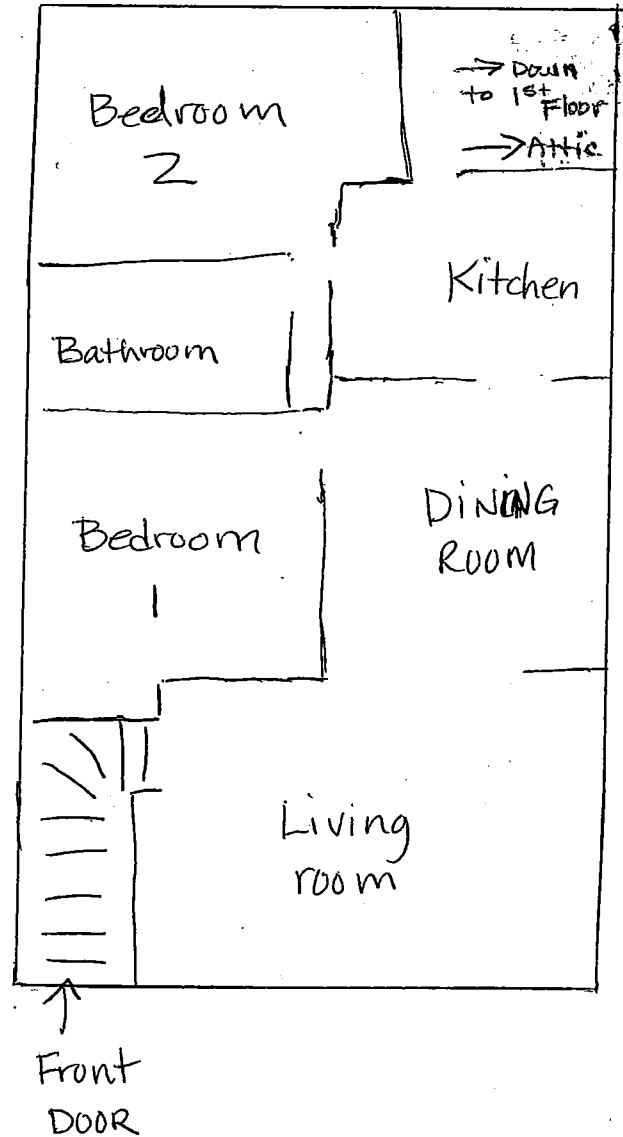
FLOOR PLANS

393 GERANIUM AVE
ST. PAUL, MN 55130

1st Floor



2nd Floor





CITY OF SAINT PAUL
Christopher B. Coleman, Mayor

375 Jackson Street, Suite 220
Saint Paul, Minnesota 55101-1806

Telephone: 651-266-8989
Facsimile: 651-266-9124
Web: www.stpaul.gov/dsi

Code Compliance Report

December 17, 2010

BANK OF AMERICA
C/O JACQUELINE FRANK, REALTOR, KELLER WILLIAMS
659 BIELENBERG DRIVE SUITE 100
WOODBURY MN 55125

Re: 393 Geranium Ave E
File#: 09 054737 VB2

Dear Property Owner:

The following is the Code Compliance report you requested on December 06, 2010.

Please be advised that this report is accurate and correct as of the date December 17, 2010. All deficiencies identified by the City after this date must also be corrected and all codes and ordinances must be complied with. This report is valid for 365 days from December 17, 2010. This report may be used in lieu of a Truth in Housing Report required in St Paul Legislative Code 189. This building must be properly secured and the property maintained at all times.

In order to sell or reoccupy this property the following deficiencies must be corrected:

BUILDING **Inspector: Jim Seeger** **Phone: 651-266-9046**

- Cover water meter pit with concrete or decay resistant, screwed-down cover. Cleanouts to be flush with floor slab.
- Install 20 minute fire rated doors, with self closing device, between common areas and individual units. All penetrations required to have property intumescent device or caulk (per current building codes).
- Maintain one hour fire separation between dwelling units and between units and common areas.
- Install handrails (34 inches - 38 inches above each nosing) and guardrails (36 inch minimum) at all stairways, and return hand rail ends into a newel post or wall per attachment.
- Repair or Replace any deteriorated window sash, broken glass, sash holders, re-putty, etc as necessary.
- Provide complete storms and screens, in good repair for all door and window openings.

Re: 393 Geranium Ave E
December 17, 2010
Page 2

BUILDING

Inspector: Jim Seeger

Phone: 651-266-9046

- Provide functional hardware at all doors and windows
- Repair or replace damaged doors and frames as necessary, including storm doors.
- Weather seal exterior doors, threshold and weather-stripping.
- Repair walls, ceiling and floors throughout, as necessary.
- Prepare and paint interior and exterior as necessary. Observe necessary abatement procedures (EPA, MPCA and St. Paul Legislative Code, Chapter 34 for additional information) if lead base paint is present.
- Air-seal and insulate attic/access door.
- Install Smoke Detectors/Carbon Monoxide Detectors per MN Co Conservation Code and the MN Dept. of Labor and Industry.
- Provide major clean-up of premises.
- Repair siding, soffit, fascia, trim, etc. as necessary.
- Provide proper drainage around house to direct water away from foundation of house.
- Provide proper drainage around house to direct water away from foundation of garage.
- Install rain leaders to direct drainage away from foundation.
- Provide general rehabilitation of garage.
- Provide durable, dustless parking surface as specified in the zoning code for second parking spots.
- Review all applicable codes & policies when replacing windows including egress windows for sleeping rooms.
- Remove trees which are against foundation of home and garage.
- Openings in stair risers must be less than 4 inches.
- Repair or replace cut joist over basement stairs at bottom of basement.
- Remove window from wall between first floor rear bedroom closet and rear common area stairwell and install 1 hour fire rated assembly.
- Insure 1 hour fire rated ceiling over first floor bathroom dropped ceiling.
- Replace broken tread on front stairs to second floor.
- Install tempered glass in stair landing window in front stairs.
- Install guardrail and handrails to code on basement and attic stairs also.
- Insure 1 hour fire rating between house and garage.
- Install handrail to code at front steps to house.
- A building permit is required to correct the above deficiencies.

ELECTRICAL

Inspector: Jamie McNamara

Phone: 651-266-9037

- Ground the electrical service to the water service with a copper conductor within 5 feet of the entrance point of the water service
- Bond around water meter with a copper wire sized for the electrical service per Article 250 of the NEC
- Provide a complete circuit directory at service panel indicating location and use of all circuits

Re: 393 Geranium Ave E
December 17, 2010
Page 3

ELECTRICAL **Inspector: Jamie McNamara** **Phone: 651-266-9037**

- Verify/install a separate 20 ampere laundry circuit and a separate 20 ampere kitchen appliance circuit
- Close openings in service panel/junction box with knock out seals, breaker blanks and/or junction boxes
- Properly strap cables and conduits in basement
- Install/replace GFCI receptacle in first and second floor bathroom adjacent to the sink
- Ground bathroom light in first and second floor bathroom and disconnect receptacle on fixture
- Remove all cord wiring
- Repair or Replace all broken, missing or loose light fixtures, switches and outlets, covers and plates
- Check all outlets for proper polarity and verify ground on 3-prong outlets
- Remove any 3-wire ungrounded outlets and replace with 2-wire or ground 3-wire to code
- Install hard-wired, battery backup smoke detector per bulletin 80-1 and other smoke detectors as required by the IRC. Also, Install carbon monoxide detector(s) within 10 feet of all bedrooms
- Remove and or/ re-wire all illegal, improper or hazardous wiring in basement/garage
- Check building write-up for fire resistance requirements if both panels are in the common area in a basement or move 2nd unit electrical panel board to the second unit
- Second floor center bedroom add second receptacle. Attic remove loose romex. In basement re-install missing wiring to code, count services and all circuits on permits. First floor back entry, remove phone wire from electrical boxes. In dining room add second receptacle.
- All added receptacles must be grounded, tamper-resistant and be on an Arc-Fault Circuit Interrupter-protected circuit.
- Any open walls or walls that are opened as part of this project must be wired to the standards of the 2008 NEC.
- All buildings on the property must meet the St. Paul Property Maintenance Code (Bulletin 80-1).
- All electrical work must be done by a Minnesota-licensed electrical contractor under an electrical permit.

PLUMBING **Inspector: Denny Watters** **Phone: 651-266-9051**

- Both Units - Basement - Water Heater - T and P relief discharge piping incorrect (MPC 2210 Subp. 4).
- Both Units - Basement - Water Heater - T and P valve Required (MPC 2210 Subp. 2)
- Both Units - Basement - Water Heater - Vent must be in chimney liner (IFGC 501.12)
- Both Units - Basement - Water Heater - Water piping incorrect (MPC 1730 Subp. 1)
- Both Units - Basement - Water Heater - gas venting incorrect (IFGC 503)
- Both Units - Basement - Water Heater - not fired or in service (MPC 2180)
- Basement - Water Meter - meter is removed or not in service (MPC 4715.1700) missing.

Re: 393 Geranium Ave E
December 17, 2010
Page 4

PLUMBING

Inspector: Denny Watters

Phone: 651-266-9051

- Basement - Water Meter - raise meter to a minimum 12 inches above floor (MPC 2280)
- Basement - Water Meter - remove meter from pit (MPC 88.08)
- Basement - Water Piping - boiler fill water line requires backflow assembly or device (MPC 2100)
- Basement - Water Piping - run 1 inch water line from meter to first major take off (SPRWS Water Code)
- Basement - Gas Piping - add appropriate metal hangers (IFGC 407.2)
- Basement - Gas Piping - dryer gas shutoff; connector or piping incorrect (IFGC 402.1) strap to wall.
- Basement - Gas Piping - run dryer vent to code (IFGC 613.1 - IMC 604.1)
- Basement - Soil and Waste Piping - add appropriate hangers (MPC 1430 Subp. 4)
- Basement - Soil and Waste Piping - improper connections, transitions, fittings or pipe usage (MPC 2420) FERNCO
- Basement - Soil and Waste Piping - no front sewer clean out (MPC 1000)
- Basement - Laundry Tub - faucet is missing, broken or parts missing (MPC 0200. P.)
- Basement - Laundry Tub - waste incorrect (MPC 2300)
- Basement - Laundry Tub - water piping incorrect (MPC 0200 P.)
- First Floor - Gas Piping - range gas shut off; connector or piping incorrect (IFGC 411 1.3.3)
- First Floor - Lavatory - fixture is missing (MPC 0200 0.)
- First Floor - Sink - fixture is missing (MPC 0200 0.) worn out
- First Floor - Sink - waste incorrect (MPC 2300)
- First Floor - Sink - water piping incorrect (MPC 0200 P.)
- First Floor - Tub and Shower - Provide access (MPC 0900)
- First Floor - Tub and Shower - provide anti-scald valve (MPC 1380. Subp. 5)
- First Floor - Tub and Shower - waste incorrect (MPC 2300)
- Second Floor - Gas Piping - range gas shut off; connector or piping incorrect (IFGC 411 1.3.3)
- Second Floor - Lavatory - fixture and lavatory is missing (MPC 0200 0.)
- Second Floor - Tub and Shower - Provide access (MPC 0900)
- Exterior - Lawn Hydrants - Broken or parts missing (MPC 0200 K)
- Exterior - Lawn Hydrants - Requires backflow assembly or device (MPC 2000)
- Obtain plumbing permits prior to commencement of work.

HEATING

Inspector: Maureen Hanson

Phone: 651-266-9043

- Install approved lever handle manual gas shutoff valve on furnace and boiler and remove unapproved valves.
- Clean and Orsat test furnace and boiler burners. Check all controls for proper operation. Check furnace heat exchanger for leaks; provide documentation from a licensed contractor that the heating units are safe.

Re: 393 Geranium Ave E
December 17, 2010
Page 5

HEATING

Inspector: Maureen Hanson

Phone: 651-266-9043

- Install approved metal chimney liner.
- Replace furnace and boiler flue venting to code.
- Connect furnace, boiler and water heater venting into chimney liner.
- Provide adequate clearance from flue vent pipe on furnace and boiler to combustible materials or provide approved shielding according to code.
- Vent clothes dryer to code.
- Provide adequate combustion air and support duct to code.
- Provide support for gas lines to code.
- Plug, cap and/or remove all disconnected gas lines.
- Provide a window in the bathrooms with an aggregate glazing area of not less than 3 square feet, one-half of which must be openable or provide exhaust system vented to outside. A mechanical ventilation permit is required if an exhaust system is installed.
- All supply and return ducts for warm air heating system must be clean before final approval for occupancy. Provide access for inspection of inside of ducts or provide documentation from a licensed duct-cleaning contractor that the duct system has been cleaned.
- Repair and/or replace heating registers as necessary.
- Provide heat in every habitable room and bathrooms.
- Attach metal tag to expansion tank valve stating that this valve must be OPEN at all times except when draining the expansion tank.
- Support supply and return piping for heating system according to code.
- Conduct witnessed pressure test on hot water heating system and check for leaks.
- Install boiler pressure relief valve and pipe discharge to within eighteen inches of the floor.
- Install back flow preventer on city water fill line to hot water heating system and pipe vent as required.
- Repair or replace fin tube radiation and covers as needed.
- Repair or replace radiator valves as needed.
- Install second floor heating system to code, remove boiler from premises if not to be re-piped.
- Gas and hydronic mechanical permits are required for the above work.

ZONING

1. This property is in a (n) R4 zoning district.
2. This property was inspected as a Duplex.

Re: 393 Geranium Ave E
December 17, 2010
Page 6

This property was inspected as a Duplex which is not permitted in this zoning district; this property may be a non-conforming use and will require zoning approval before a sale can be approved, any permits may be issued or any work on the property is started.

Notes:

- See attachment for permit requirements and appeals procedure.
- Roof, sidewalks, etc. snow covered and could not be inspected. All must meet appropriate codes when completed.
- Interior of garage not available for inspection. Repair per applicable codes.

This is a registered vacant building. In order to sell or reoccupy this building, all deficiencies listed on this code compliance report must be corrected within six (6) months of the date of this report. One (1) six-month time extension may be requested by the owner and will be considered if it can be shown that the code compliance work is proceeding and is more than fifty (50) percent complete in accordance with Legislative Code Section 33.03(f).

You may file an appeal to this notice by contacting the City Clerk's Office at 651-266-8688. Any appeal must be made in writing within 10 days of this notice. (You must submit a copy of this notice when you appeal, and pay a filing fee.)

If you have any questions regarding this inspection report, please contact Jim Seeger between 7:30 - 9:00 AM at 651-266-9046 or leave a voice mail message.

Sincerely,

James L. Seeger
Code Compliance Officer
Department of Safety and Inspections
City of Saint Paul
375 Jackson Street, Suite 220
Saint Paul MN 55101
Phone: 651-266-9046
Email: james.seeger@ci.stpaul.mn.us

JLS:ml
Attachments

June 1, 2011

To: City of St. Paul

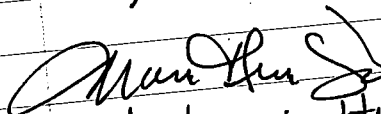
RE: 393 Geranium Ave. E

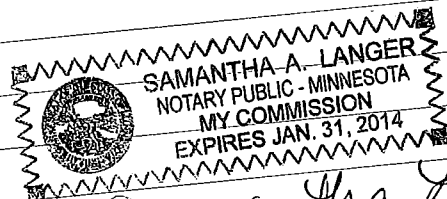
To whom It May Concern:

The property owners who willfully signed the petition were fully aware that they were signing for the 393 Geranium Ave. E. property.

I have personally spoken and discussed the property with them while pointing to and showing them the property.

Sign,


Samantha Hurshuager.



Samantha Langer
6/1/11

CITY OF SAINT PAUL

CONSENT OF ADJOINING PROPERTY OWNERS FOR A NONCONFORMING USE PERMIT

We, the undersigned, owners of the property within 100 feet of the subject property acknowledge that we have been presented with the following:

A copy of the application of NUCHAMI HURSHUAJER
(name of applicant)

to establish a DUPLEX
(proposed use)

located at 393 GERAMIUM AVE.
(address of property)

requiring a nonconforming use permit, along with any relevant site plans, diagrams, or other documentation.

We consent to the approval of this application as it was explained to us by the applicant or his/her representative.

| ADDRESS OR PIN | RECORD OWNER | SIGNATURE | DATE |
|----------------|------------------|--------------|---------|
| 1140 ARKwright | VATON & Ying HER | Ying Her | 5-5-11 |
| 380 ROSE AVE. | Khuan Tran | Khuan Tran | 5-5-11 |
| 1142 Arkwright | Jean Lang | Jean Lang | 5-5-11 |
| 1163 Arkwright | Mary Hubert | Mary Hubert | 5-5-11 |
| 386 ROSE AV | Anton's | Anton's | 5-5-11 |
| 390 Geranium | Wendy Wiseth | Wendy Wiseth | 5-6-11 |
| 1146 Arkwright | Jean Lang | Jean Lang | 5-23-11 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

NOTE: All information on the upper portion of this application must be completed prior to obtaining eligible signatures on this petition.

CONSENT OF ADJOINING PROPERTY OWNERS FOR A
NONCONFORMING USE PERMIT

A copy of the application of _____
(name of applicant)


to establish a Duplex _____
(proposed use)

located at _____
(address of property)

We consent to the approval of this application as it was explained to us by the applicant or his/her representative.

[illegible]

NOTE: All information on the upper portion of this application must be completed prior to obtaining eligible signatures on this petition.

 **SAMANTHA A. LANGER**
NOTARY PUBLIC - MINNESOTA
MY COMMISSION
EXPIRES JAN. 31, 2014

prior to obtaining eligible
Sumantra Langir 19/08

CITY OF SAINT PAUL

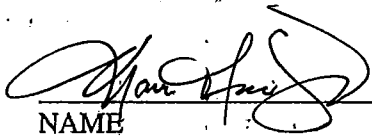
AFFIDAVIT OF PETITIONER FOR A CONDITIONAL
USE PERMIT OR A NONCONFORMING USE
PERMIT

STATE OF MINNESOTA)

:SS

COUNTY OF RAMSEY)

The petitioner, Nuchami Hurshuager, being first duly sworn, deposes and states that the consent petitioner is informed and believes the parties described on the consent petition are owners of the parcels of real estate described immediately before each name; each of the parties described on the consent petition is an owner of property within 100 feet of the subject property described in the petition; the consent petition contains signatures of owners of at least two-thirds (2/3) of all eligible properties within 100 feet of the subject property described in the petition; and the consent petition was signed by each said owner and the signatures are the true and correct signatures of each and all of the parties so described.

X 
NAME

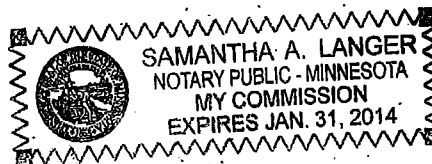
X 2415 Cypress St., Maplewood
ADDRESS MN 55109

X 651-373-4700
TELEPHONE NUMBER

Subscribed and sworn to before me this

25 day of May, 2011.

Samantha Langer
NOTARY PUBLIC



ZONING PETITION SUFFICIENCY CHECK SHEET

REZONING

SCUP

NCUP

FIRST SUBMITTED

RESUBMITTED

DATE PETITION SUBMITTED: _____

DATE PETITION RESUBMITTED: _____

DATE OFFICIALLY RECEIVED: 6-1-11

DATE OFFICIALLY RECEIVED: _____

PARCELS ELIGIBLE: 16

PARCELS ELIGIBLE: _____

PARCELS REQUIRED: 11

PARCELS REQUIRED: _____

PARCELS SIGNED: 11

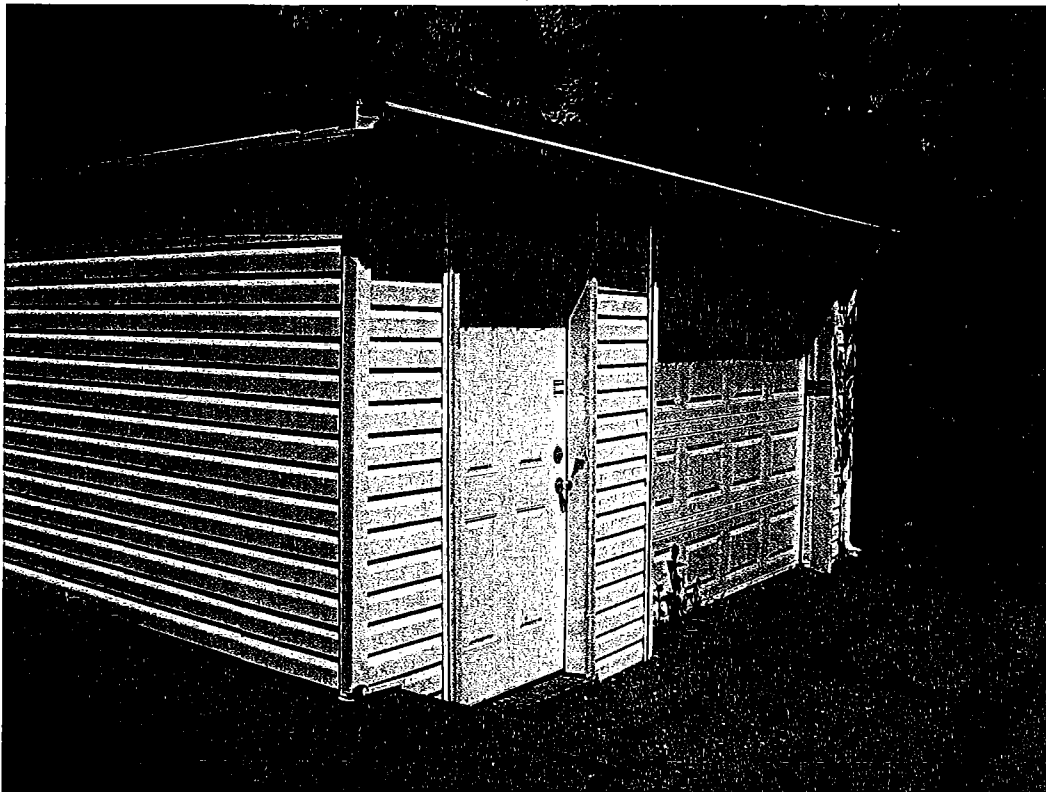
PARCELS SIGNED: _____

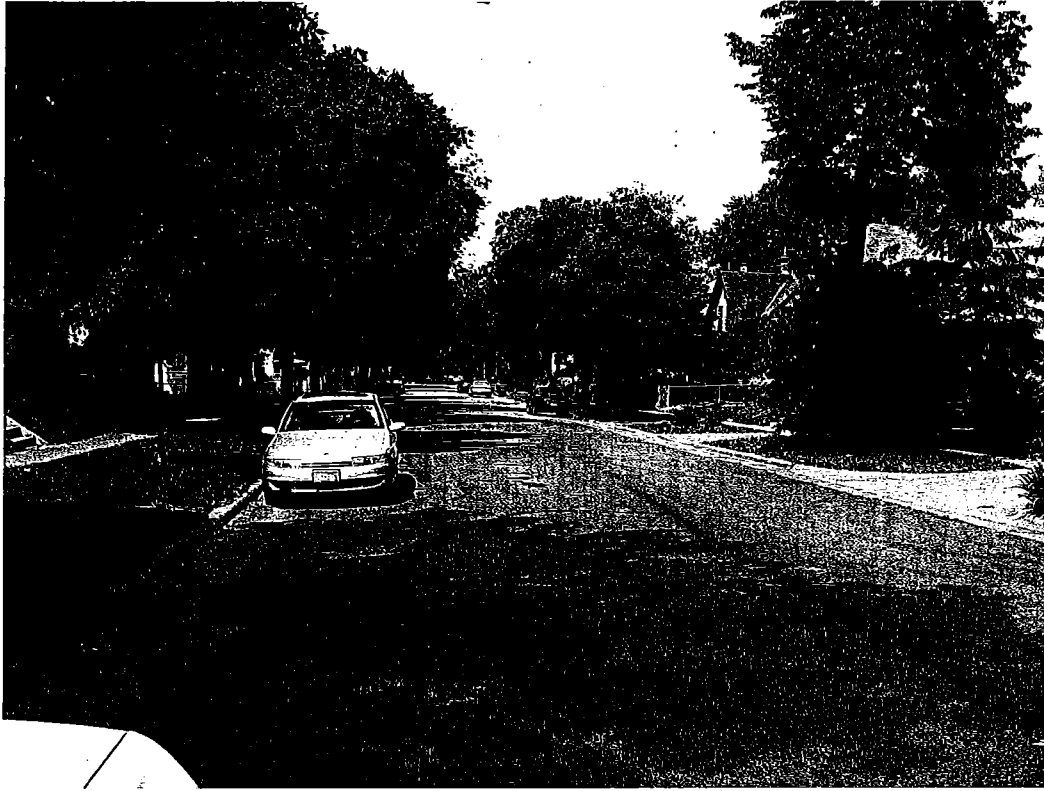
CHECKED BY: Paul Dubruel

DATE: 6-1-11

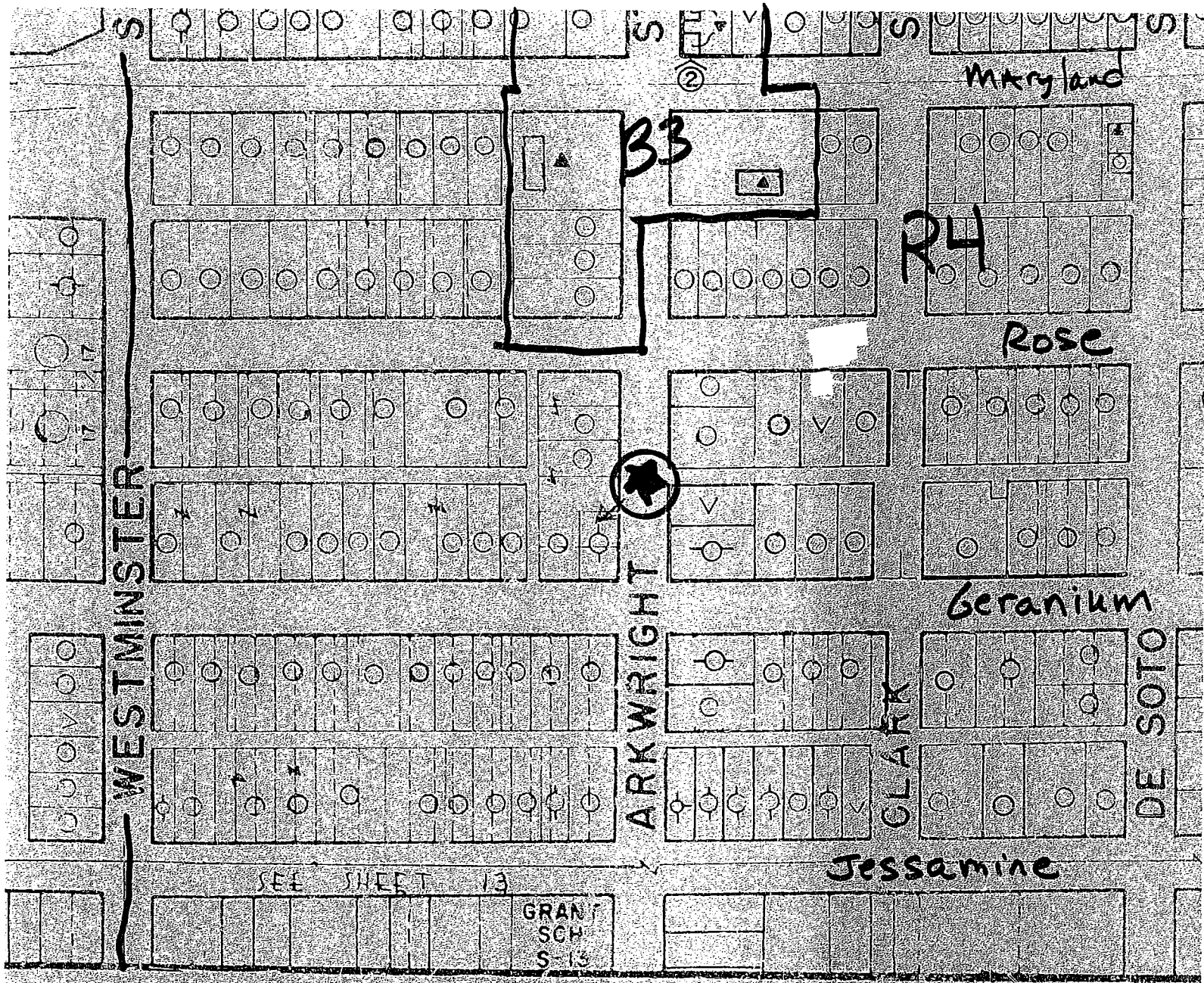


393 Geranium Avenue E





Geranium Ave E, looking west



APPLICANT Muchami Hurshuajer

PURPOSE RE-EST NCUP

FILE # 11-149363 DATE 6-2-11

PLNG. DIST 5 Land Use Map # 5

SCALE 1" = 100' Zoning Map # 4

LEGEND

zoning district boundary

subject property

○ one family
 ⊙ two family
 ⊕ multiple family

• ▲ ◌ commercial
 ◆ ▬ industrial
 V vacant

